Research and Development Classification Process
Status Report

Kelli F. Willshire
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EXECUTIVE SUMMARY

The Research and Development Classification Process (RDCP) was started in the summer of 2001 to ensure that covered employees have accurate and properly classified position descriptions. The covered employees are those for whom stature and contributions figure heavily into the scoring of the classification results. These positions are referred to as "person-in-the-job" positions. Peer panels are used to determine the appropriate classification using Office of Personnel Management classification guides. The process can result in classifications higher than the employee's current grade level and thus a promotion occurs.

This report describes the process and results for the first seven sessions. The RDCP has been used to review 481 eligible R&T employees in seven sessions conducted from July 2001 through December 2003. In addition to the 481 employees reviewed, up to 56 branch heads and 356 panel members have participated. The process does require some time, the average is between 29-69 hours, for all participants: branch heads, reviewees, and panel members.

For all seven sessions there has been an overall promotion rate of approximately 56% based on all the people reviewed and has resulted in a total of 271 promotions, including resolution of appeals and desk audits. Of these, 185 were promoted to GS-14 and 86 to GS-15 grade levels, or 65% of the GS-13s considered were promoted while 58% of the GS-14s considered were promoted. There has been no statistical difference in results by race, Competency, peer group, or session in terms of grade change/promotion. Males and females have been promoted in proportion to the RDCP population.

Results from surveys conducted at the end of each session indicate improved ratings over the seven sessions. In addition, positive comments were received from the 2002 Center survey about RDCP.

However, budget availability drives the rate of the process and is critical to the Center's ability to keep commitments to the covered employees for timely reviews. The original plan was to review all eligible employees within two years during nine sessions or quarters. But, primarily due to budget issues, along with some other changes, the schedules have stretched out so that the ninth session will not be started until the end of 2004, a year later than originally planned.

Monitoring of the process will continue and improvements will be made where possible. The RDCP Manager and Advisory Committee recommend that firm budget allocations be made early in each fiscal year to enable timely reviews. At the time of this writing, any impacts on RDCP of the impending reorganization are unknown. However, they recommend any changes to RDCP due to the Center reorganization still allow timely reviews for those employees not yet reviewed of the original nine sessions, specifically to continue Sessions 8, 9, and 9R.

DESCRIPTION OF RDCP

The Research and Development Classification Process (RDCP) is a process to ensure that all covered employees are properly classified according to OPM standards. This means that they have the appropriate grade level for their (updated and accurate) position descriptions. The RDCP provides review of researcher positions on a cyclical basis to assure classification accuracy is maintained. Thus, RDCP provides documentation for the appropriate pay for these positions.

The RDCP was created so that there would be a classification system that is clear and understandable to employees and managers, be consistent across the Competencies, and provide a published process and grade level criteria. This was partly in response to a Center survey indicating lack of understanding of classification systems at the Center. The system needed to be fair to both "researchers" and "development engineers." Modeled after similar processes long used by some other agencies, LaRC developed the RDCP. Covered employees are those whose jobs are considered person-in-the-job positions for which the individual's stature and impact of contributions weigh heavily in the final determination of the grade level. Management ultimately has the responsibility to ensure that this is accomplished; however, this process was designed to provide opportunity for maximum employee participation in the process. The RDCP uses peer groups to apply criteria specified by the Office of Personnel Management (OPM) classification guides for these positions. The actual classification actions are executed by the Office of Human Resources.

The RDCP includes permanent Aerospace Technologist jobs classified under the Office of Personnel Management (OPM) Research Grade Evaluation Guide (RGEG) and the Equipment Development Grade Evaluation Guide (EDGEG), grades GS-13 through GS-15. (Those not covered include supervisors, technical staff, other individuals on the Table of Position Management, or individuals whose job fits classification guides other than the RGEG or EDGEG. AST term or temporary hires are also excluded from RDCP as those positions usually are for a maximum of four years, which is the nominal RDCP review rate per individual.) Positions are classified based on the factors identified in these guides and are considered to be person-in-the-job positions. That is, the individual's expertise and accomplishments are significantly factored into the position classification.

A peer-review process is the process OPM recommends be used for these types of jobs to determine the person's stature and impact of contributions because the peers, rather than managers or OHR classification specialists alone, would better understand the relevance of the contributions and stature in the field. In addition, in part by having the RDCP, LaRC does not have controls beyond budget constraints for the approximately 750 RDCP covered positions. The philosophy is that people have the stature and experience they have and that cannot be taken away to control grade level. Therefore, we should pay people for their appropriate grade and plan the budget accordingly. Panels composed of peer group members decide by consensus the recommended classifications for each of the covered positions, with Center-level management and Human Resources oversight. Managers are still very much involved. Managers decide to which peer groups

employees belong. They are responsible for ensuring the accuracy of the position description and the employee's package. The branch head can use the criteria provided by the OPM guides and feedback from the RDCP panels as considerations when making employee job assignments or for use in career development. The RDCP does not in any way replace performance assessments so that managers still perform those reviews. Managers are still responsible for rewarding their employee's performance using means other than RDCP. Managers do recommend employees for early RDCP reviews and provide feedback to the RDCP manager about the RDCP. Thus the employee's management is involved in the entire classification process rather than only at the front end. Similarly, classification recommendations are made by peers with the ability to make an accurate evaluation of stature and impact rather than high-level managers who may have neither the time nor technical expertise across the total spectrum of Center technical disciplines to perform this function. The RDCP manager works with an advisory committee to improve the quality of the RDCP and meets with them regularly.

The RDCP uses peer panels to evaluate the individual's expertise and accomplishments by applying the classification guides through a consensus decision-making process of peer scientists and engineers. These peers, acting as subject matter experts, identify impact of work performed, scope of assignments, and contributions to the field that lead to consistent and fair classification determinations. RDCP panel members are non-supervisory Langley employees. Peer panels evaluate positions based on OPM RGEG and EDGEG guides to determine the appropriate grade levels for positions reviewed. The panels arrive at consensus decisions for each person reviewed. The RDCP Manager and the Office of Human Resources (OHR) representatives provide technical and administrative assistance throughout the process. The RDCP relies on the active involvement of employees and management in each step of the process to ensure that required actions are met and that appropriate decisions are made. (Details about the RDCP can be found at this website: http://ohr.larc.nasa.gov/rdcp.)

Because a complete R&T-wide review of these positions had not been conducted for these positions for some time, the intent was for an accelerated review cycle was established in order to get everyone reviewed the first time as quickly as possible, within two years. However, due to budget constraints it is taking about three and one half years to complete these reviews. Thereafter, a regular review cycle of about every four years per employee is expected. Nine (including one for overflow, 9R) sessions were organized for the accelerated review cycle. Employees covered under RDCP at the time of implementation were assigned to an appropriate peer group as determined by their respective Competency Director and Branch Heads. Then, each employee was randomly assigned to one of the nine sessions, based on grade so that the resulting distribution within each session approximately matched the distribution of grades of all the relevant employees. The dates for these sessions are in Table 1. The shaded areas shown in Figure 1 indicate in which sessions the respective peer groups are being reviewed. Currently, there are twelve peer groups with either eight or nine peer groups being reviewed each session.

This paper presents the status of the RDCP through the first seven sessions, including the results and subsequent changes to the process.

Table 1. Schedule of Past and Future RDCP Sessions
(* Tentative dates subject to change)

Session 1 (01-1)
Employees notified for review July 15, 2001
Reports released September 30, 2001

Session 2 (01-2)
Employees notified for review September 5, 2001
Reports released December 23, 2001

Session 3 (02-1)
Employees notified for review December 21, 2001
Reports released June 2, 2002

Session 4 (02-2)
Employees notified for review May 16, 2002
Reports released September 8, 2002

Session 5 (02-3)
Employees notified for review September 27, 2002
Reports released March 4, 2003

Session 6 (03-1)
Employees notified for review April 15, 2003
Reports released August 1, 2003

Session 7 (03-2)
Employees notified for review August 15, 2003
Reports released December 19, 2003

Session 8 (03-3)
Employees notified for review March 31, 2004
Packages due OHR and RDCP manager May 14, 2004
Panels prepare May 17-June 18, 2004
Panels meet June 21-August 6, 2004
Reports released August 13, 2004

Session 9 (04-1)*
Employees notified for review September, 2004
Packages due OHR and RDCP manager October, 2004
Panels prepare November, 2004
Panels meet December-January, 2005
Reports released by March, 2005

Session 9R (04-1)*
Overflow from Session 9 - TBD

Session 10 (05-1)*
Start of recurring cyclic reviews
FY05 Dates TBD

Peer Group	Session Being Reviewed										
	1	2	3	4	5	6	7	8	9	9R	10
Aero & Acoustics	X	X	X	X	X	X	X		X	X	X
Aerospace Sys	X		X	X	X	X	X	X			X
Aerothermo		X			X	X		X	X		
Atmospheric Science	X	X	X	X	X	X	X	X		X	X
Computational Methods	X		X			X	X		X		X
Computer Systems		X		X			X	X			TBD
Crew Systems		X	X		X		X	X	X		TBD
Dynamics & Ctrls	X	X	X		X	X		X	X		
Flight Instrumentation	X	X	X	X	X				X		TBD
Research Systems	X	X	X	X	X	X	X	X	2	2	X
Sensors, Instrum & Meas	X	X	X	X		X	X	X			X
Structures & Mtls	X		X	X		X	X		X		X

Figure 1. Peer Groups assigned to sessions for review. (Blank space means not reviewed that session.)

RDCP EMPLOYEE POPULATION

There were approximately 795 employees (GS-13 through GS-15s) initially included in the randomized assignment of RDCP review sessions. Of these, at the time of session assignment, 457 were GS-13s, 223 were GS-14s, and 115 were currently GS-15s. For various reasons, the number of people determined to be covered by the RDCP was reduced. As of December 20, 2002, there were 743 employees under the RDCP, although 25 of these employees indicated that they intend to retire within the next two years and so are exempt from review. Of these 743 employees at the time of review session assignment, 443 were originally GS-13s, 202 were GS-14s, and 98 were GS-15s. The average time-in-grade at the time of session assignment for each grade level was 6.2, 7.0, and 8.9 years, respectively. However, the ranges for time-in-grade for each grade level were 1 to 34 years for GS-13s, and 1 to 40 years for the GS-14s and GS-15s. This similar range helps explain why there is no statistically significant correlation between the original grade level and time-in-grade. Table 2 shows the distribution by grade level across all the Peer Groups including the mean, median, and mode for time-in-grade.

Table 2. Initial Distribution of Grade Level across all Peer Groups.

ORIGINAL GRADE LEVEL			ORIGINAL TIME-IN-GRADE (years)			
	Count	Percentage	Mean	Std. Dev.	Median	Mode
GS-13	443	60%	6.2	5.5	5.4	5.4
GS-14	201	27%	7.0	6.0	5.3	3.4
GS-15	99	13%	8.9	7.1	8.3	3.4
Total	743	100%	7.4	6.2	6.3	4.1

Table 3 shows the initial grade level distribution and time-in-grade for each peer group. Note that one of the peer groups, Flight Instrumentation Research, did not have any GS-15s at the start of RDCP. And, Computer Science only had one GS-15. Not surprisingly, all peer groups had more GS-13s than any other grade level, although the percentages between the grade levels differed somewhat by peer group. For example, after the two peer groups just mentioned, Crew Systems had the lowest percentage (7%) of GS-15s while Atmospheric Science had the highest percentage (30%) within their respective peer groups.

Table 3. Initial Distribution of Grade Level and Time-in-Grade by Peer Group

REVIEWEE PEER GROUP	ORIGINAL GRADE LEVEL			TIME-IN-GRADE (years)	
		Count	Percentage	Mean	Median
Aero & Acoustics	GS-13	49	55.7%	6.8	4.7
	GS-14	26	29.5%	7.3	6.8
	GS-15	13	14.8%	9.6	9.7
	Total	88	100.0%	7.9	7.1
Aerospace Systems Analysis	GS-13	45	64.3%	6.4	5.4
	GS-14	18	25.7%	5.9	5.3
	GS-15	7	10.0%	9.5	2.3
	Total	70	100.0%	7.3	4.3
Aerothermo	GS-13	20	55.6%	5.7	5.4
	GS-14	13	36.1%	9.9	5.3
	GS-15	3	8.3%	7.3	6.3
	Total	36	100.0%	7.6	5.7
Atmospheric Science	GS-13	33	45.9%	5.0	4.3
	GS-14	17	23.6%	6.2	5.3
	GS-15	22	30.5%	8.4	9.3
	Total	72	100.0%	6.5	6.3
Computational Methods	GS-13	23	51.1%	3.7	2.5
	GS-14	13	28.8%	4.9	3.4
	GS-15	9	20.0%	10.6	8.3
	Total	45	99.9%	6.4	4.7
Computer Sci & Engineering	GS-13	15	55.5%	6.8	6.9
	GS-14	11	40.7%	9.8	9.3
	GS-15	1	3.7%	na	na
	Total	27	99.9%	8.3	8.1
Crew Systems	GS-13	37	67.3%	5.4	5.2
	GS-14	14	25.5%	5.6	5.3
	GS-15	4	7.2%	7.0	8.2
	Total	55	100.0%	6.0	6.2
Dynamics & Controls	GS-13	35	56.4%	6.6	5.4
	GS-14	20	32.3%	4.4	3.4
	GS-15	7	11.3%	9.0	8.3
	Total	62	100.0%	6.7	5.7
Flight Instrumentation Research	GS-13	31	70.5%	7.0	5.4
	GS-14	13	29.5%	12.3	11.5
	GS-15	0	0.0%	na	na
	Total	44	100.0%	9.7	8.5
Research Systems	GS-13	91	68.4%	6.8	6.4
	GS-14	28	21.1%	7.1	6.7
	GS-15	14	10.5%	7.1	7.7
	Total	133	100.0%	7.0	6.9
Sensors, Instrumentation & Measurement	GS-13	32	61.6%	6.7	4.3
	GS-14	10	19.2%	7.4	7.3
	GS-15	10	19.2%	8.6	8.8
	Total	52	100.0%	7.6	6.8
Structural Mech & Adv Mtls	GS-13	32	54.2%	4.9	4.9
	GS-14	18	30.5%	6.2	4.9
	GS-15	9	15.3%	11.6	11.3
	Total	59	100.0%	7.6	7.0

Gender and race breakout: Out of the total 743 employees, 85 % were males and 15 % females, and 84% were White and 16 % were not White. The breakout of the RDCP population by gender and race is given in Table 4.

Table 4. RDCP Population distribution by Gender and Race.

Gender	Race		Total Gender
	White	Non-White	
Female	12.9%	2.2%	15.1%
Male	70.7%	14.3%	84.9%
Total Race	83.6%	16.4%	100.0%

More details about the breakdown of the non-White portion of the population are that 8% were Asian, 5 % were Afro American, 3 % were Hispanic, and less than 1 % were Native American. Of the non-White males, 9 % were Asian, 4 % were Afro American, 3 % were Hispanic, and less than 1 % were Native American. Of the non-White females, 5 % were Asian, 7 % were Afro American, 3 % were Hispanic, and 0 % was Native American. This distribution is illustrated in Figure 2. These slight differences in the distribution of race between the two genders are not statistically significant.

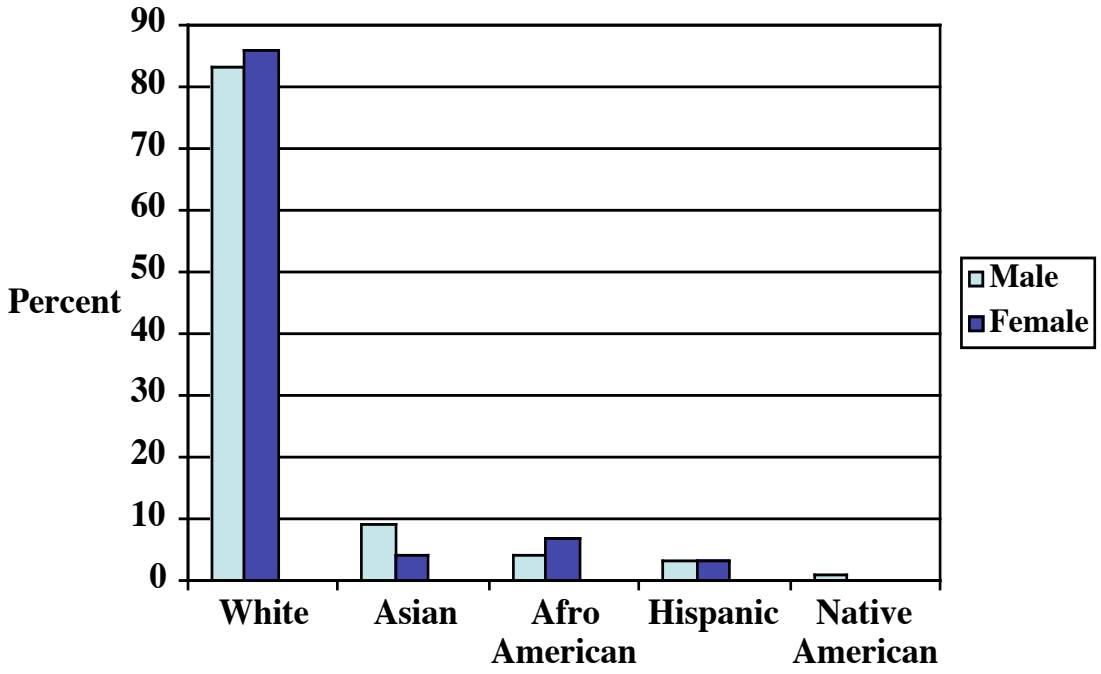


Figure 2. Distribution of RDCP participants by race and gender.

The original distribution of minorities and gender for each Peer Group is shown in Table A-1 in Appendix A. Some Peer Groups had different percentages than the overall percentages, but with some exceptions, the trends were similar.

The distribution of grade level by race and gender is shown in Table 5.

Table 5. RDCP Population distribution by Race, Gender, and Original Grade Level

Race	Gender	Original Grade 13	Original Grade 14	Original Grade 15	Total Gender by Race
White	Female	11.3%	3.4%	0.8%	15.5%
	Male	47.2%	24.6%	12.7%	84.5%
	Total	58.5%	28.0%	13.5%	100.0%
Non-White	Female	11.5%	0.8%	0.8%	13.1%
	Male	54.1%	22.1%	10.7%	86.9%
	Total	65.6%	23.0%	11.5%	100.0%

The small differences between original grade level and race are <u>not</u> statistically significant. That is, for each grade level there was approximately the same percentage of Whites and Non-Whites. This distribution is illustrated in Figure 3.

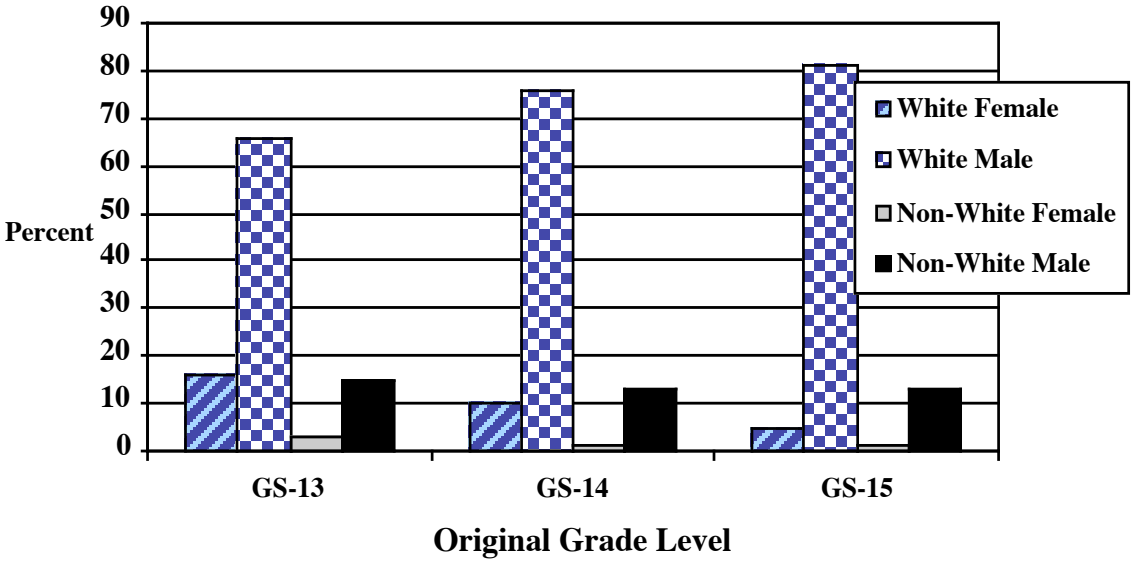


Figure 3. Distribution of race and gender within original grade level.

However, there is a significant difference between the genders (across race). As shown in Table 6, there were substantially higher percentages of males in the GS-14 and GS-15

original grade levels compared to the females. For example, only 5.4% of the females were originally GS-15s but 14.6% of the males were originally GS-15s.

Table 6. Distribution of Original Grade Level within Gender.

Gender	Original Grade			Total Gender
	GS-13	GS-14	GS-15	
Female	75.0%	19.6%	5.4%	100.0%
Male	56.9%	28.4%	14.7%	100.0%

Peer Groups and Competencies

As indicated by the Table 7 below showing the original breakout of peer groups within each Competency, a particular Competency has a dominant peer group even though it may participate in other peer groups. In total, fifty-seven branches participate in RDCP.

Table 7. Original Distribution of Peer Groups within each Competency.

Reviewee Peer Group	Competency Percentage					
	RA	RB	RC	RD	RE	RF
Aero & Acoustics	2%	47%				
Aerospace Sys	80%			1%		1%
Aerothermo		20%				
Atmospheric Science			2%		99%	1%
Computational Methods	7%	8%	15%	2%		1%
Computer Science	4%	4%			1%	12%
Crew Systems				40%		
Dynamics & Controls			20%	26%		
Flight Instrumentation			1%	17%		15%
Research Systems	7%	4%		14%		70%
Sensors, Instrum & Meas		17%	16%			
Structures & Materials			46%			
TOTAL	100%	100%	100%	100%	100%	100%

This distribution is illustrated in Figure 4, below.

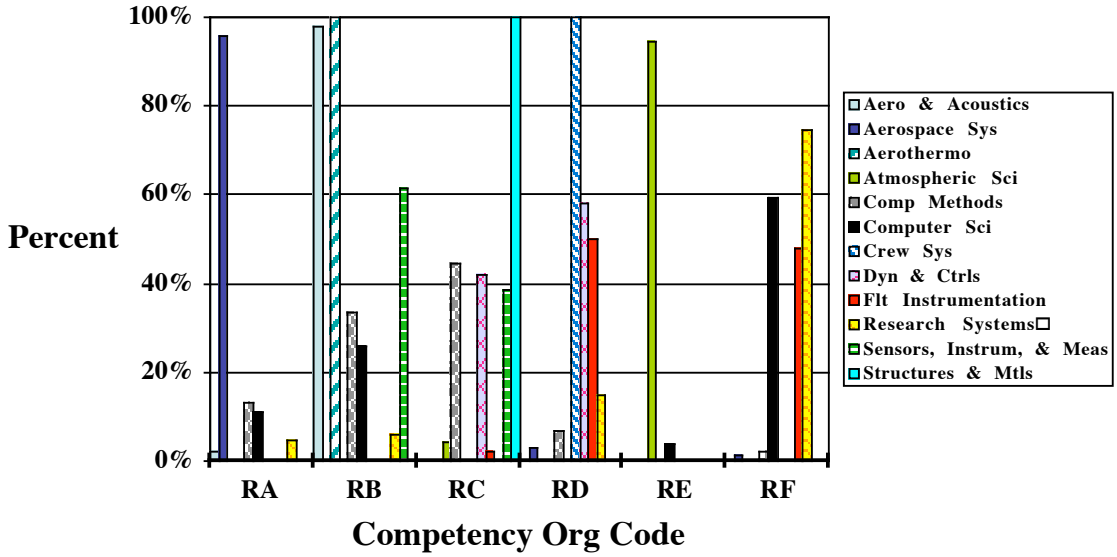


Figure 4. Illustration of original distribution of peer groups within each Competency.

The percentage within each peer group made up originally by each Competency, along with the breakout by grade level, is shown in Table 8.

Table 8. Composition of Peer Groups by Percentage of Original Grade and Competency

Reviewee Peer Group	Original Grade	Competency Org Code						TOTAL by Grade
		RA	RB	RC	RD	RE	RF	
Aero & Acoustics	13	2%	53%					55%
	14	0%	30%					30%
	15	0%	15%					15%
	Total	2%	98%					
Aerospace Systems Analysis	13	61%			1%		1%	64%
	14	26%			0%		0%	26%
	15	9%			1%		0%	10%
	Total	96%			3%		1%	
Aerothermo	13		56%					56%
	14		36%					36%
	15		8%					8%
	Total		100%					

Table 8, continued

Atmospheric Science	13			3%		43%	0%	46%
	14			0%		24%	0%	24%
	15			1%		28%	1%	31%
	Total			4%		94%	1%	
Computational Methods	13	7%	13%	22%	7%		2%	51%
	14	4%	11%	13%	0%		0%	29%
	15	2%	9%	9%	0%		0%	20%
	Total	13%	33%	44%	7%		2%	
Computer Science	13	4%	11%			4%	37%	56%
	14	7%	15%			0%	18%	41%
	15	0%	0%			0%	4%	4%
	Total	11%	26%			4%	55%	
Crew Systems	13				67%			67%
	14				26%			26%
	15				7%			7%
	Total				100%			
Dynamics & Controls	13			26%	30%			56%
	14			11%	21%			32%
	15			5%	7%			12%
	Total			42%	58%			
Flight Instrumentation	13			2%	34%		34%	70%
	14			0%	16%		14%	30%
	15			0%	0%		0%	0%
	Total			2%	50%		48%	
Research Systems	13	5%	5%		12%		47%	68%
	14	0%	1%		3%		17%	21%
	15	0%	0%		1%		10%	11%
	Total	5%	6%		15%		74%	
Sensors, Instrumentation & Meas	13		40%	21%				61%
	14		10%	10%				20%
	15		11%	8%				19%
	Total		61%	39%				
Structures & Materials	13			54%				54%
	14			31%				31%
	15			15%				15%
	Total			100%				

AMOUNT OF TIME INVOLVED

Seven sessions have been conducted to date (starting in July 2001), reviewing a total of 481 employees in about 54 branches over 64 panels involving a total of 356 employees as panel members. Time was required for the reviewees and supervisors to prepare the packages, for the panel members to review the packages including conducting in-depth reviews and for the actual panel evaluation meetings. Time was also required to attend training sessions both as reviewees and as panel members. Time involvement was measured in two ways: subjective responses to session participant surveys and analysis of RDCP FCS charges.

RDCP has an FCS number to which participants may charge their time. An analysis of the charges made to this number between August 2003 and December 2003 was done. This time period covered all of Session 7. (Data for other sessions were incomplete or unavailable due to the switch to the new time & attendance system.) Although not every participant charged to this FCS to account for his or her time spent on the RDCP, a very large percentage did use the FCS: 44% of the branch heads, 96 % of the reviewees, and 100 % of the panel members. Average time spent on RDCP Session 7 was 29 hours for the branch heads, 65 hours for the reviewees and 72 hours for the panel members, so that the overall average was 64 hours. Note that the branch heads' time is the average total time spent on RDCP, not the time spent on each individual reviewee. Most branch heads have more than one reviewee per session.

In comparison, in response to a Session 7 survey question about how much time was spent on the RDCP, the average times respondents said they spent on RDCP was almost the same, even though the same people may not have responded to the survey as recorded their time in Webtads. From the survey responses, the average number of hours spent on the RDCP was about 64 but with statistically significant differences between branch heads (average 26 hours) and reviewees (average 68 hours) , and panel members (average 71 hours). There was no significant difference between reviewees and panel members' average time spent.

In comparison to earlier sessions, the average number of hours reported to the JO or FCS for each of Session 2, 3, 4 and 7 are shown in Figure 5 by the participant role (e.g., branch heads, reviewees, and panel members.) In general, branch heads' time spent in Session 7 is equal to that for Session 4, whereas the reviewees' time is less in Session 7 than in Session 4, and the panel members' time is a little greater in Session 7 than in the previous sessions.

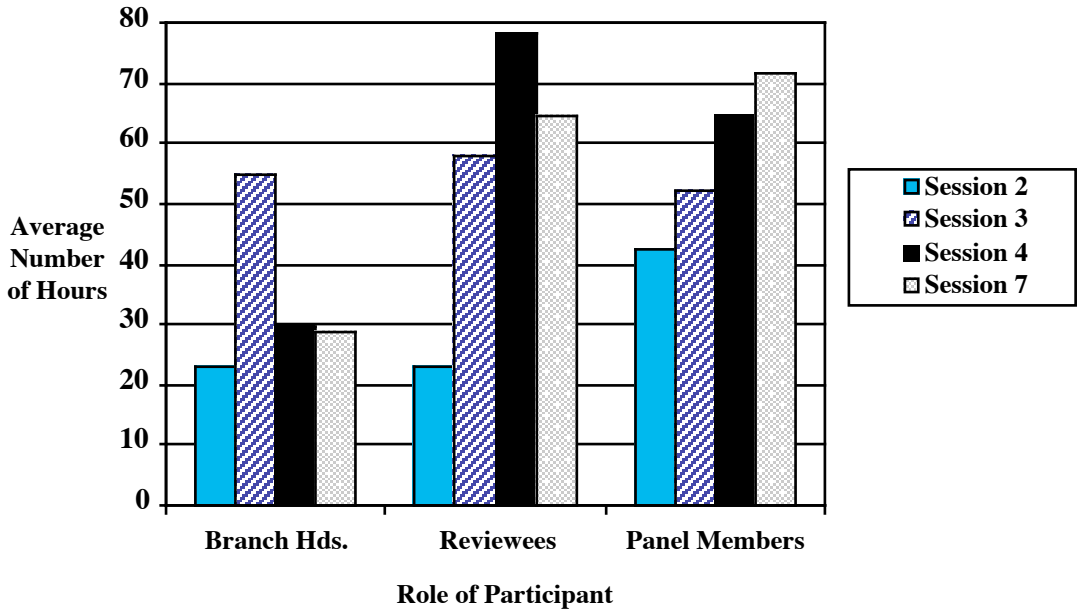


Figure 5. RDCP JO or FCS Time Charges by Role and Sessions 2, 3, 4 and 7.

About 50 % of the participants completed the session surveys. In comparing survey responses about time spent across the sessions, the time spent by branch heads dropped after Session 3 but has increased a little in more recent sessions to be between 20 and 25 hours. The time spent by reviewees and panel members have been more consistent, generally between an average of 57 to 72 hours. The standard deviations for reviewees and panel members were about 30 hours for each session.

The average number of hours reported in the session survey for each of Sessions 2 through 7 is shown in Figure 6 by the participant role (e.g., branch heads, reviewees, and panel members.)

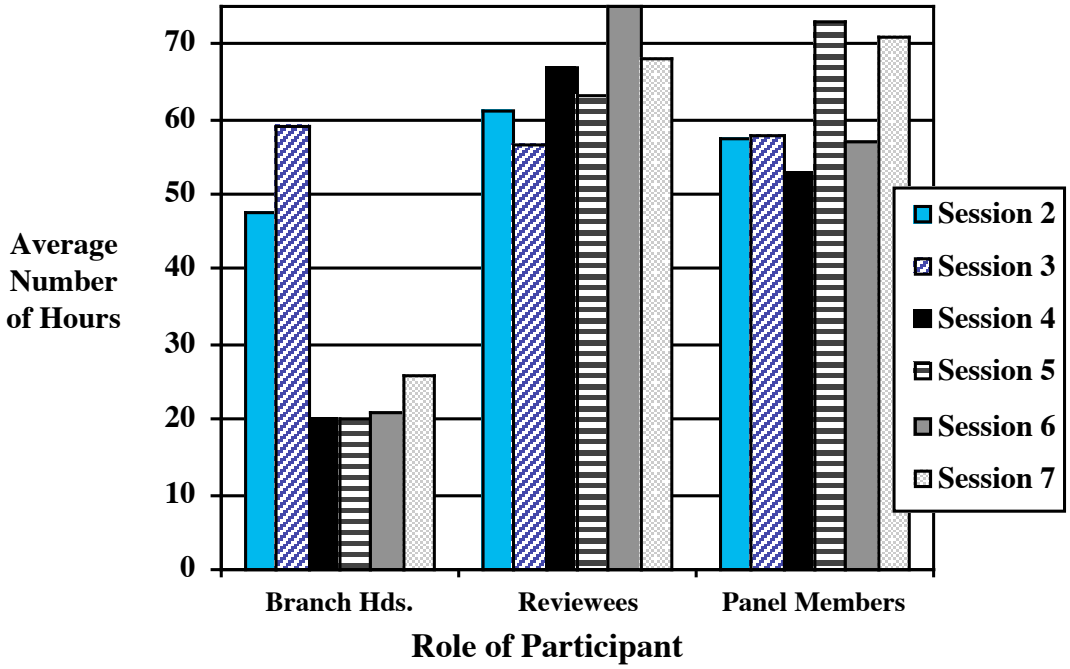


Figure 6. Reported time spent on RDCP via survey for Sessions 2 through 7 by role of participant.

There is no way to know if the same people reported using the JO or FCS as responded to the survey. Of course any measure of time involved is only as good as the data people entered. These data may be off depending upon how accurately people kept track of the time they spent on RDCP.

RESULTS TO DATE

Seven sessions have been conducted as of December 20, 2003 (starting in August 2001), reviewing a total of 481 employees (some as repeat reviews). A total of 795 were originally assigned one of nine sessions for review, but that number has been refined since the first session to the current number of 712 reviewees. Subtracting the 30 people who have indicated that they intend to retire by the end of FY05, the actual number of current reviewees is 682. Therefore, 71% of the initial reviews was complete by the end of Session 7. The remaining original sessions are scheduled to be complete by the end of FY05.

In summary, of the 481 reviews conducted, the panels determined that an average of 52% (250) were above grade, 41% (199) were determined to be at grade, less than 1%(2) were determined to below grade, and the remainder, 6% (30), were not classified (either due to Guide Not Applicable or Insufficient Information). (Actual number of reviews for each category is shown in parentheses, above.) Of the panel decisions, 168 people were promoted from GS-13 to GS-14, and 77 people were promoted from GS-14 to GS-15. Of the people determined to be at grade, 54 people (11% of the total reviewed or 22% of those found at grade) appealed the panel decision, most of whom had been decided as borderline above grade. Eighteen, or 33% of the appeals, were determined to be above grade. Also, some desk audits were conducted to resolve some of the Guide Not Applicable cases and early in the process. The above-grade appeal and desk audit decisions changed slightly the total percentage of the above-grade determinations to an average of 56% or 271 promotions (185 to GS-14 and 86 to GS-15 or 65% and 58% of those considered were promoted, respectively) while the at-grade determinations remain 41% of all reviews, with the remainder still being Insufficient Information to be reviewed at a later date. The range of promotions per session was 51% to 61%, including resolution of appeals and desk audits.

There were no statistical significant differences by gender or race for the final grade level decision (including appeals). More males are promoted than females, as shown in Table 9. But this is in proportion to the distributions within the RDCP population. Seven percent (34) of the 271 people promoted were females and 15% of the RDCP population are females. Likewise, 47% (237) of the people promoted were males and 85% of the RDCP population are males.

Table 9. Distribution of Final Decision Category over all seven sessions for gender within race.

Race	Gender	Final Decision			Total
		Above Grade	At Grade	Other	
White	F	7.4%	6.9%	1.0%	15.3%
	M	47.1%	28.9%	8.7%	84.7%
	Total	54.5%	35.9%	9.6%	100.0%
Non-White	F	3.3%	5.6%	2.2%	11.1%
	M	44.4%	35.6%	8.9%	88.9%
	Total	47.8%	41.1%	11.1%	100.0%

The distribution from Table 9 is illustrated in Figure 7 below.

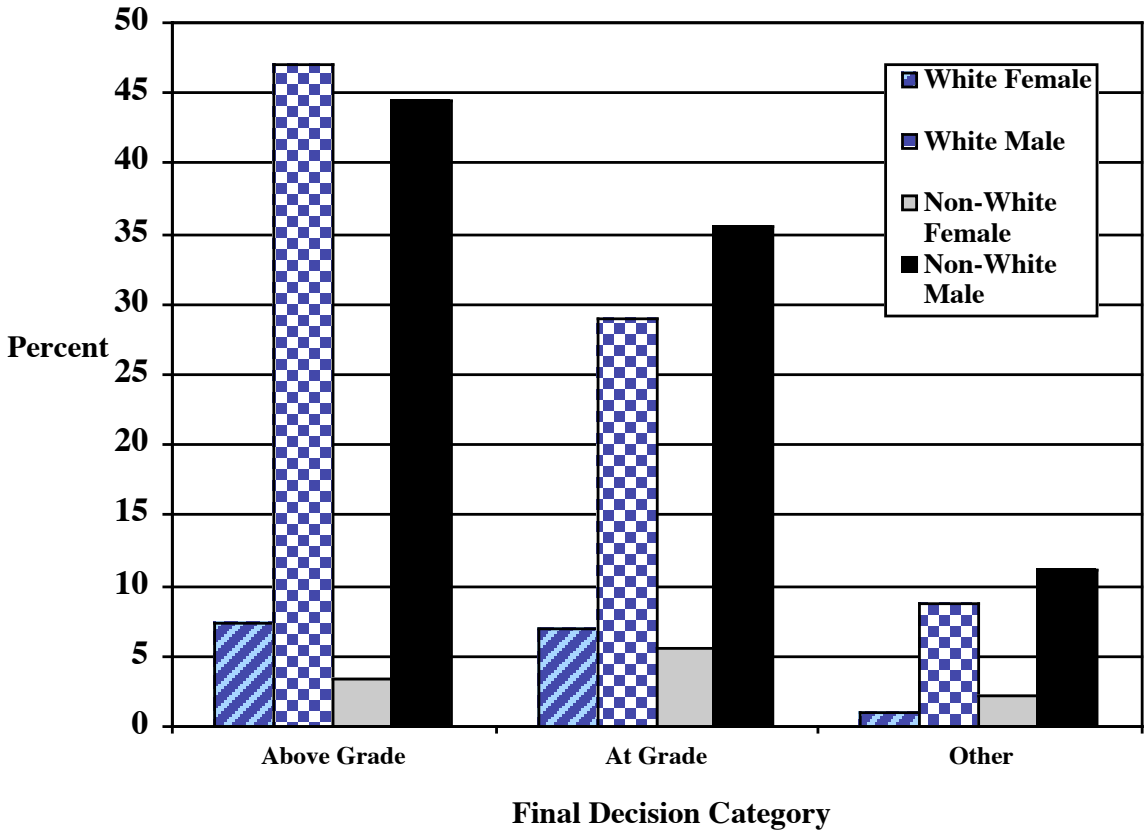


Figure 7. Distribution of race and gender within final panel decision category across Session 1 through Session 7.

However, compare Table 10 to Table 11 below. Table 10 shows the distribution of the RDCP population while Table 11 shows the distribution for the people actually reviewed.

Table 10. Distribution of RDCP population (N=743) by race and gender

Gender	Race		Total Gender
	White	Non-White	
F	12.9%	2.2%	15.1%
M	70.7%	14.3%	84.9%
Total Race	83.6%	16.4%	100.0%

Table 11. Distribution of RDCP Reviewees through Session 7 (n=508) by race and gender.

Gender	Race		Total Gender
	White	Non-White	
F	12.6%	2.0%	14.6%
M	69.7%	15.7%	85.4%
Total Race	82.3%	17.7%	100.0%

Note that the proportions of males and females by race reviewed over all the Peer Groups are very similar to the overall proportions of males and females by race in the RDCP population. This is illustrated in Figure 8 below.

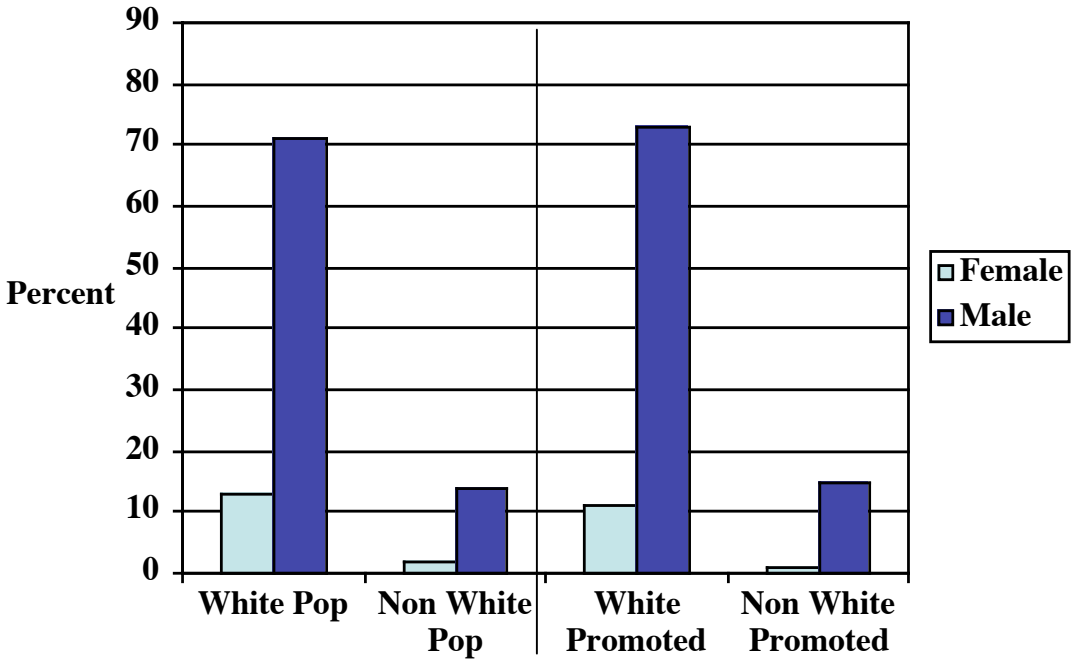
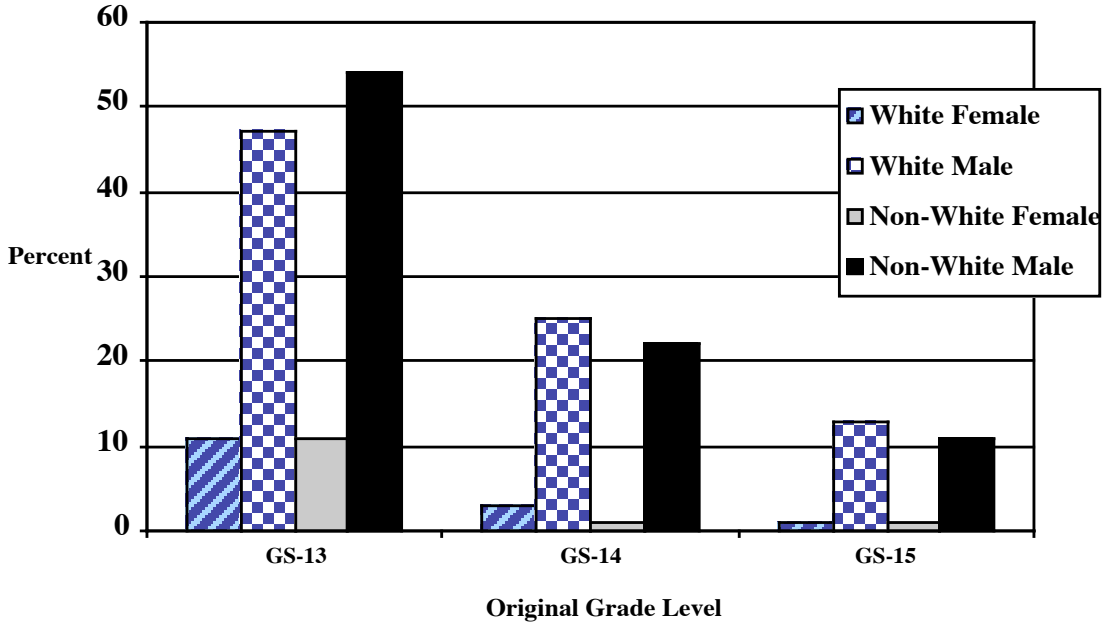
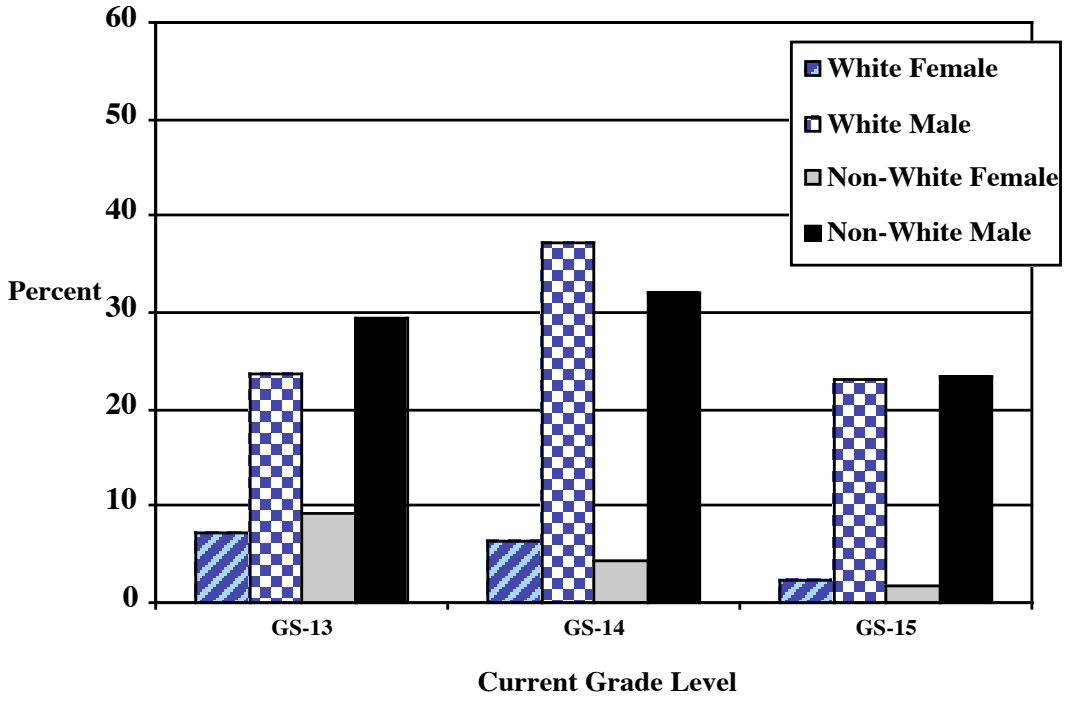


Figure 8. Distribution of race and gender within the RDCP population and within those people reviewed from Session 1 through Session 7.

Figures 9a and 9b shows the distribution of original and current grade levels within race. In general, the number of GS-13s decreased and the numbers of GS-14's and GS-15's increased for race and gender. (This does not take into account any new people entering the RDCP session beyond Session 9.)





Figures 9a and 9b. Comparison of original and current grade level, respectively, for RDCP population distribution of gender within race.

Table 12 shows the distribution of the final panel decision category by Competency for those reviewed in Sessions 1 through 7. The distribution of minorities and gender for each peer group by final decision category is shown in Table A-2 in Appendix A. There are not any significant differences for grade changes (promotions) of those people reviewed between the peer groups, competencies, or sessions. Furthermore, there were not any significant interactions among these factors.

Table 12 . Final Panel Decisions for Each Competency by Race and Gender.

Competency	Race	Gender	Final Decision			Total
			Above Grade	At Grade	Other	
ASCAC (RA)	White	F	7.5%	9.4%	3.9%	20.8%
		M	37.7%	28.3%	13.2%	79.2%
		Total	45.3%	37.7%	17.0%	100.0%
	Nonwhite	F	0.0%	0.0%	7.7%	7.7%
		M	61.5%	30.8%	0.0%	92.3%
		Total	61.5%	30.8%	7.7%	100.0%
AAAC (RB)	White	F	2.0%	5.9%	0.0%	7.9%
		M	53.5%	30.7%	7.9%	92.1%
		Total	55.4%	36.6%	8.0%	100.0%
	Nonwhite	F	0.0%	17.6%	0.0%	17.6%
		M	35.3%	35.3%	11.8%	82.4%
		Total	35.3%	52.9%	11.8%	100.0%
SMC (RC)	White	F	12.0%	13.3%	1.4%	26.7%
		M	40.0%	25.3%	8.0%	73.3%
		Total	52.0%	38.7%	9.3%	100.0%
	Nonwhite	F	4.3%	8.7%	0.0%	13.0%
		M	43.5%	39.1%	4.4%	87.0%
		Total	47.8%	47.8%	4.4%	100.0%
AIRSC (RD)	White	F	9.6%	4.1%	0.0%	13.7%
		M	52.1%	24.7%	9.5%	86.3%
		Total	61.6%	28.8%	9.6%	100.0%
	Nonwhite	F	6.3%	0.0%	0.0%	6.3%
		M	43.8%	37.5%	12.5%	93.8%
		Total	50.0%	37.5%	12.5%	100.0%
AtSC (RE)	White	F	9.8%	7.3%	2.4%	19.5%
		M	39.0%	41.5%	0.0%	80.5%
		Total	48.8%	48.8%	2.4%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0 %
		M	45.5%	36.4%	18.1%	100.0%
		Total	45.5%	36.4%	18.1%	100.0%
SEC (RF)	White	F	9.8%	2.0%	0.0%	11.8%
		M	56.9%	19.6%	11.7%	88.2%
		Total	66.7%	21.6%	11.7%	100.0%
	Nonwhite	F	14.3%	0.0%	14.3%	28.6%
		M	42.9%	28.6%	0.0%	71.4%
		Total	57.1%	28.6%	14.3%	100.0%

Table 12, continued.

Competency	Race	Gender	Final Decision			Total
			Above Grade	At Grade	Other	
RFC*	White	F	0.0%	5.9%	0.0%	5.9%
(RG)	□	M	35.3%	47.1%	11.7%	94.1%
		Total	35.3%	52.9%	11.7%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	50.0%	0.0%	50.0%	100.0%
		Total	50.0%	0.0%	50.0%	100.0%
FRSC**	White	F	0.0%	0.0%	0.0%	0.0%
(RH)		M	57.1%	42.9%	0.0%	100.0%
		Total	57.1%	42.9%	0.0%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	0.0%	100.0%	0.0%	100.0%
		Total	0.0%	100.0%	0.0%	

*Newly formed. Personnel moved from RF.

** Newly formed. Personnel moved from RD.

The following Tables 13a and 13b show the original grade level by race and gender compared to the current grade level by race and gender of those in the first nine sessions of RDCP (reviewed and not reviewed). These numbers do not include any employees new to RDCP, that is, not assigned to one of the original nine sessions.

Table 13a. Original Grade Level by Race and Gender.

Race	Gender	Original Grade			Total
		13	14	15	
White	F□	11.3%	3.4%	0.8%	15.5%
	M□	47.2%	24.6%	12.7%	84.5%
	Total	58.5%	28.0%	13.5%	100.0%
Non-White	F□	11.5%	0.8%	0.8%	13.1%
	M□	54.1%	22.1%	10.7%	86.9%
	Total	65.6%	23.0%	11.5%	100.0%

Table 13b. Current Grade Level by Race and Gender.

Race	Gender	Current Grade			Total
		13	14	15	
White	F	7.3%	6.4%	2.4%	16.1%
	M	23.7%	37.2%	23.0%	83.9%
	Total	31.0%	43.6%	25.4%	100.0%
Non-White	F	9.2%	4.2%	1.7%	15.1%
	M	29.4%	31.9%	23.5%	84.9%
	Total	28.9%	41.1%	30.0%	100.0%

For both genders and race, the percentage of GS-13s decreased (not including new GS-13s after original RDCP session assignment), while the percentage of GS-14s and GS-15s increased.

The proportion of races within each grade level is the same across grade levels as shown in Table 14 below. That is, there is no statistical difference between grade levels so that there are approximately 15-20% non-Whites in each grade level.

Table 14. Distribution within Current Grade Level by Race in Total RDCP Population

Race	Current Grade			Total
	13	14	15	
Non-White	20.4%	14.6%	16.9%	17.1%
White	79.6%	85.4%	83.1%	82.9%
Total	100.0%	100.0%	100.0%	100.0%

However, the proportion of genders within each grade level is not the same across grade levels. Even though the percentage of GS-15s has increased in RDCP, the proportion of female GS-15s, 9%, is lower than it is for GS-13s or GS-14s (24% and 14%, respectively) (See Table 15.). Or, looking at Table 16, this difference is also apparent in the lower percentage of GS-15s for females. However, considering that only 5.4% of the females were originally GS-15s at the start of RDCP, 14.4 % in the current RDCP population is an improvement and more closely matches the distribution by gender.

Table 15. Distribution within Current Grade Level by Gender in Total RDCP Population

Gender	Current Grade			Total
	13	14	15	
Female	23.6%	14.2%	9.0%	15.9%
Male	76.4%	85.8%	91.0%	84.1%
Total	100.0%	100.0%	100.0%	100.0%

Table 16. Distribution of Current Grade Level within Gender for Total RDCP Population

Gender	Current Grade			Total
	13	14	15	
Female	47.7%	37.8%	14.4%	100.0%
Male	29.4%	43.2%	27.5%	100.0%
Total	32.3%	42.3%	25.4%	100.0%

Even though there is a statistical difference between genders in the grade level distribution in that there are fewer female GS-15s, there was not a statistical difference in grade level change. That is, of those reviewed, within each gender and race category approximately the same percentages of each were promoted. There is no statistical significant difference in grade level change between White and non-White or between genders of those actually reviewed, as can be seen by looking at Tables 17 and 18 or Figure 10 below.

Table 17. Grade Change by Gender for Sessions 1 through 7.

Gender	No Grade Change	Grade Change (Promotion)	Total
Female	45.2%	54.8%	100%
Male	35.3%	64.2%	100%
Total	37.2%	62.8%	100%

Table 18. Grade Change by Race for Sessions 1 through 7.

Race	No Grade Change	Grade Change (Promotion)	Total
White	36.3%	63.7%	100%
Non-White	41.4%	58.6%	100%
Total	37.2%	62.8%	100%

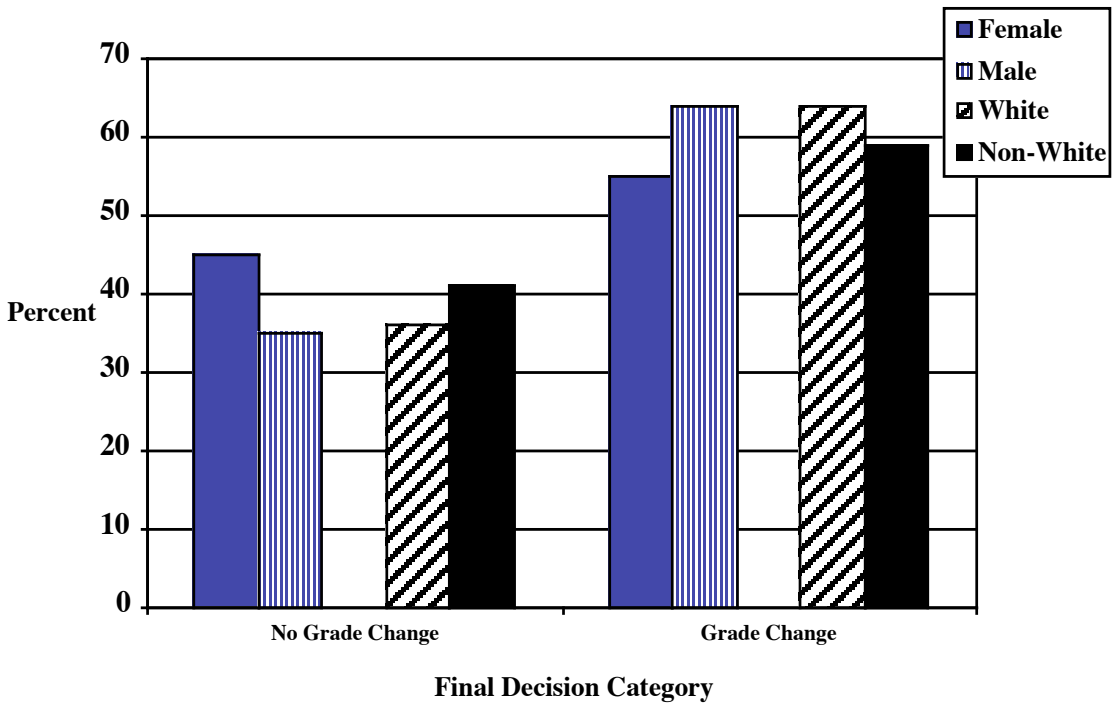
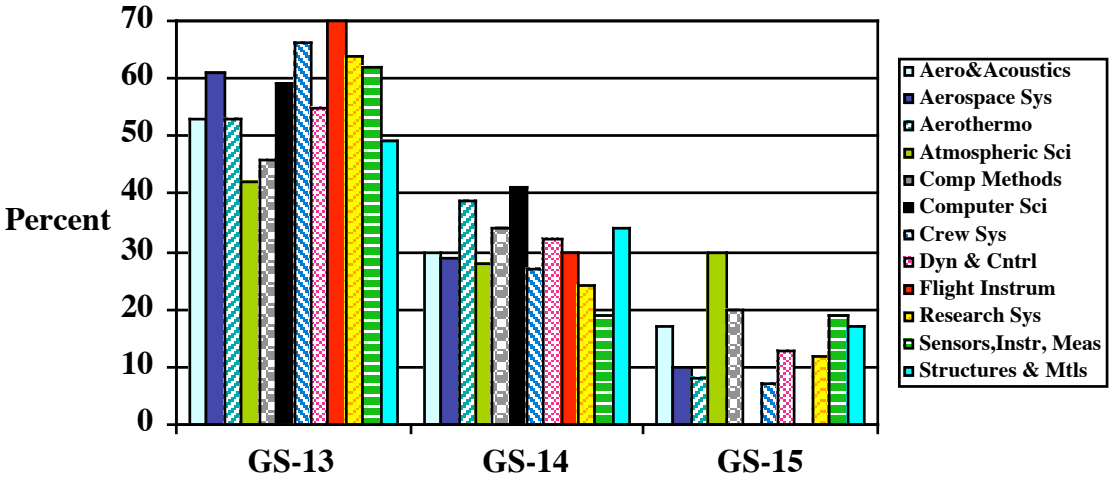


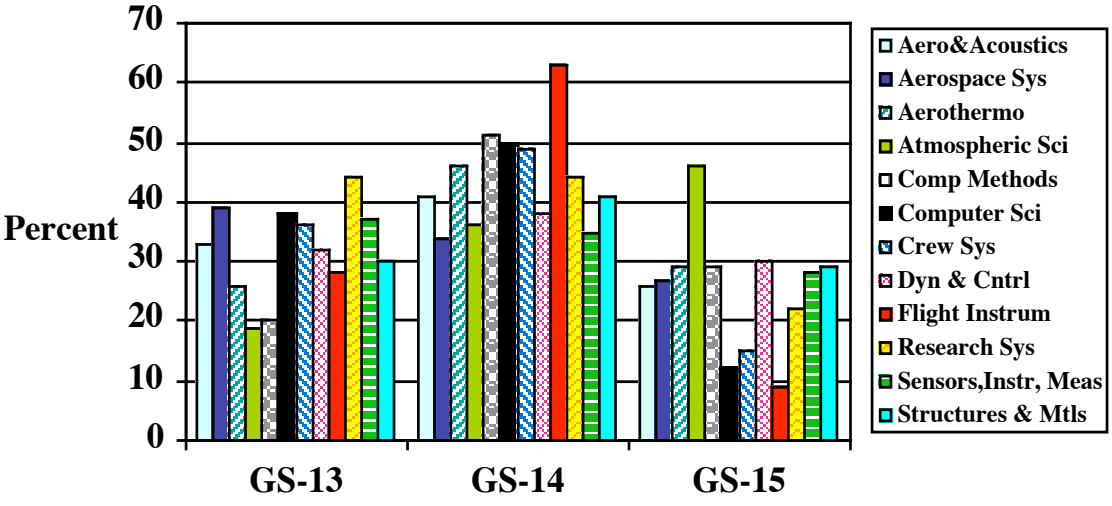
Figure 10. Comparison of grade change for gender and race for reviewees.

Appendix B contains several tables that provide the overall results in terms of final decision category, as well as, the results for each session by both Peer Group and Competency.

Figures 11a and 11b illustrate within each peer group the differences between the original and current grade levels. For example, the Aerodynamics and Acoustics peer group originally had 53% GS-13s, 30% GS-14s, and 17% GS-15s. As of the end of Session 7, this peer group had 33% GS-13s, 41% GS-14s, and 26% GS-15s. These numbers include those who were and were not reviewed. In general, the number of GS-13s decreased, while the number of GS-14s and GS-15s increased for each peer group.



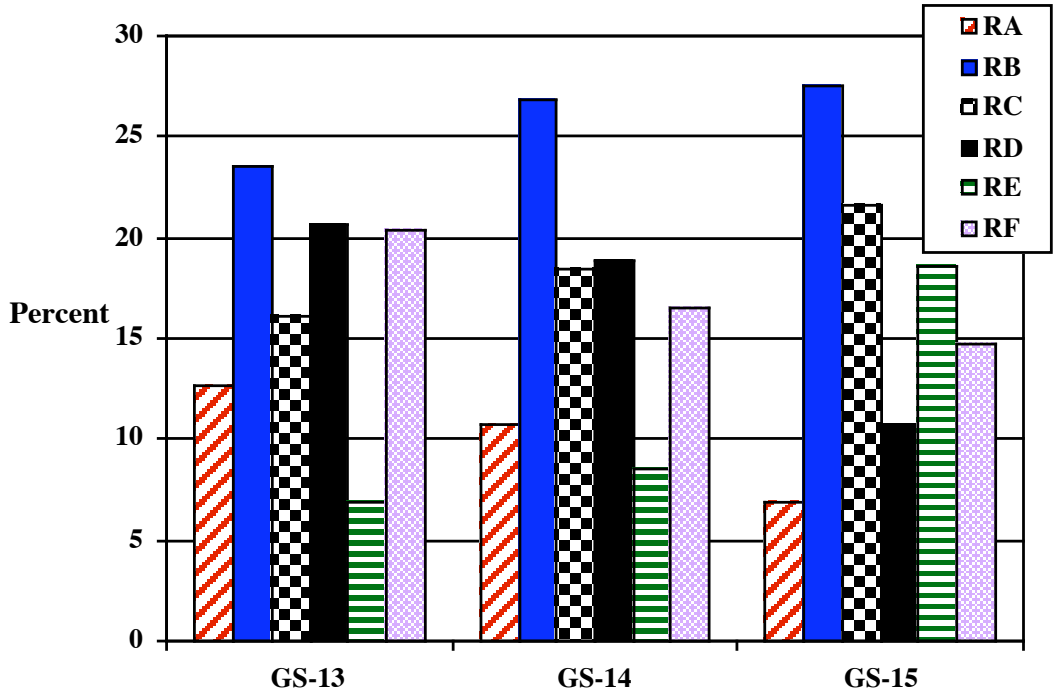
a. Original Grade Level



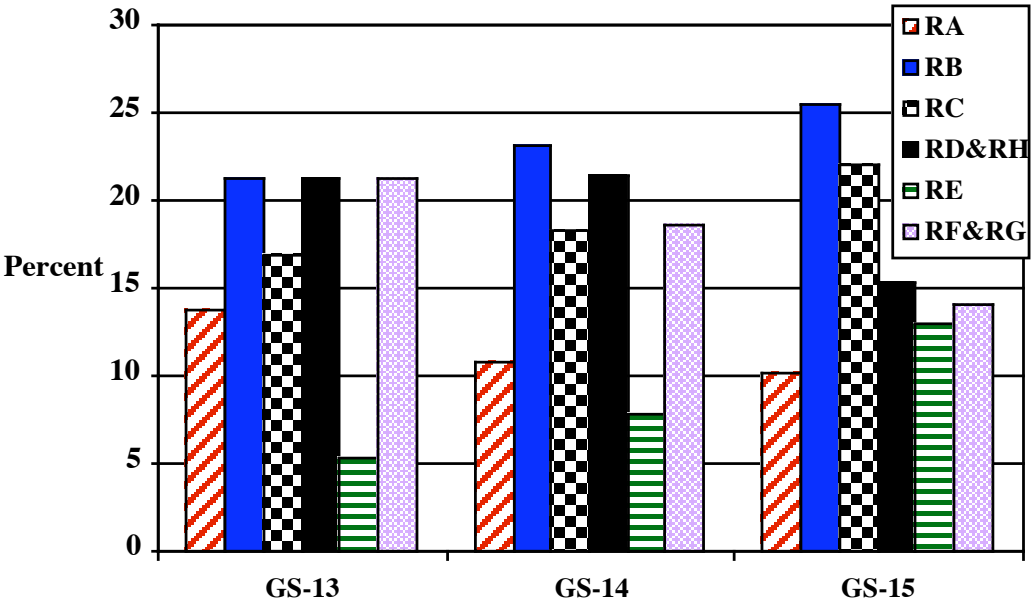
b. Current Grade Level

Figures 11a and 11b. Initial and current grade levels within each Peer Group.

Figures 12a and 12b illustrate within each grade level for each Competency the differences between the original and current grade levels. That is, of the original GS-13s, 13% were in RA (Aerospace Systems, Concepts, and Analysis), 23% in RB (Aerodynamics, Aerothermodynamics, and Acoustics), etc. As of the end of Session 7, of the GS-13s, 14% were in RA, 21% in RB, etc. These numbers include those who were and were not reviewed. The competencies that had more of the GS-13s and GS-14s originally still have the most. Similarly, with the exception of two competencies, those competencies that had more of the GS-15s originally still have the most of them. There is no statistical difference by Competency in the number of promotions received.



a. Original Grade Level



b. Current Grade Level

Figure 12a and 12b. Comparison within original and current grade levels, respectively, for RDCP population by Competency. (New Competencies combined with old for comparison.)

FEEDBACK

Session Surveys

At the end of each session, a brief voluntary survey was made of that session's participants (Branch Heads, Panel Members, and Reviewees). In addition to rating twelve items from strongly disagree to strongly agree, the respondents were given the opportunity to make additional comments. (A copy of the survey questions is in Appendix C.) All of these responses were analyzed and summarized into reports posted onto the RDCP website, http://ohr.larc.nasa.gov/rdcp. This is a summary of the major findings and trends from those surveys.

Overall, there was an improvement in average RDCP ratings with each session. The rating scale was numbers from 1 to 5 indicating strongly disagree to strongly agree, respectively. The average rating scores for Sessions 1 and 2 ranged from 2.48 to 3.64, while for Sessions 3 and 4 the survey responses were between 2.7 and 4.1. Sessions 1 and 2 had only five items with ratings greater than or equal to 3.0 (neither disagree nor agree). But, by the end of Session 4, this had improved so that nine items had average ratings greater than or equal to 3.0. The three items that were below 3.0 were Fair Selection (item 5) 2.98, Improved Classification Process (item 11) 2.93, and Improved Morale (item 13) 2.98. And, because these three items were all between 2.93 and 2.98, they were only marginally below 3.0. By Session 7, all but two of the twelve items had average ratings greater than or equal to 3.0. Those two items, Conducted Consistently (item 10) and Improved Morale (item 13), had average ratings close to 3.0 (2.97 and 2.90, respectively). In that changes have been made to the RDCP throughout the sessions (see Table 19), a perception that it has not been conducted consistently is understandable. For reviewees, improvement of morale depended upon if they were promoted. If they were promoted, the average rating was 3.26 whereas if they were decided at grade, the average rating was 2.07. The average rating was 1.74 for those who were found to have insufficient information or something else.

For nine items there were statistically significant differences according to an analysis of variance (ANOVA) among the sessions. For all of these items, in general, the average rating score improved with each session. The average ratings for these items are shown for each session in Figure 13.

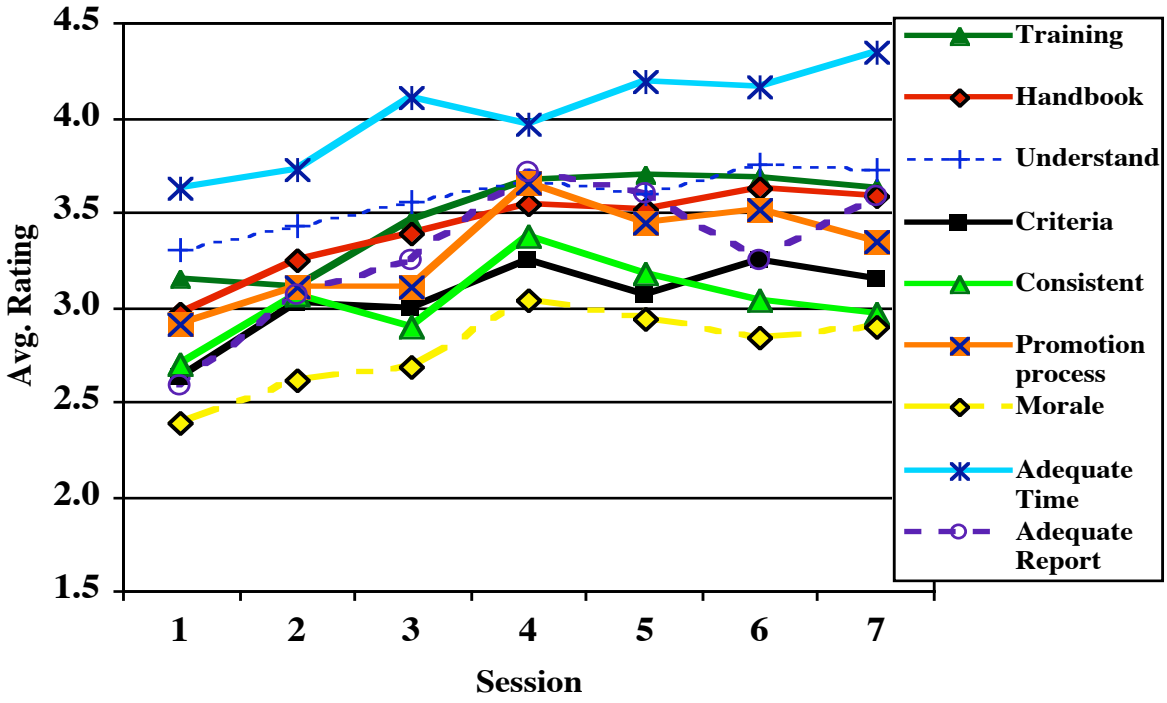


Figure 13. Significant survey response differences across sessions

For some items, there were no statistical differences across sessions, as shown in Figure 14. The ratings remained relatively neutral for Fair Selection (item 5) reflecting some comments received that the random selection process is not seen as fair or that some people do not understand the selection process. With the exception of a few wild cards, selection for review is random and is not based on likelihood of any person's promotion. This explanation started being addressed in training for Session 6. For item 11, there is indication that the RDCP is an improved *classification* process although from the comments, some people weren't sure what this question meant in that they either didn't know what "classification" meant or what the previous process was. The consistently higher ratings for Item 15 indicate that respondents tend to agree with the panel decisions.

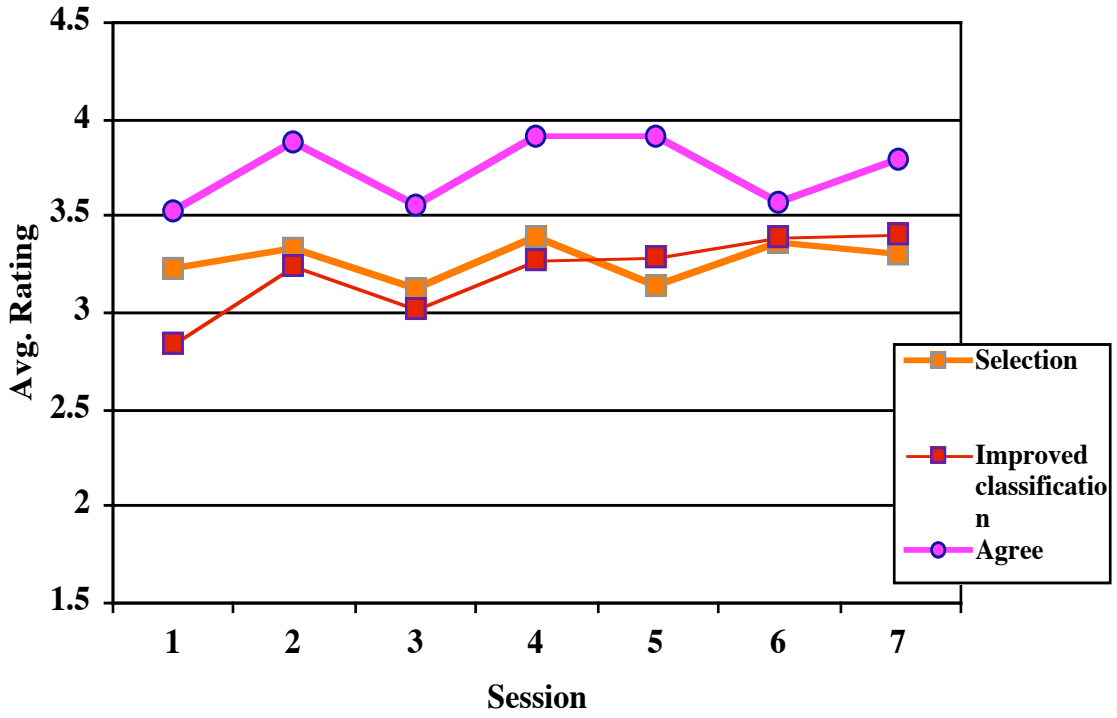


Figure 14. Average ratings across sessions that did not differ significantly.

In addition, there were nine items for which the average rating scores varied by the role of the participant: Branch Head, panel member, or reviewee. Branch heads reported less time spent on the process (item 3) and had lower ratings for Allowed Adequate Time (item 14) than the panel members or reviewees. Also, Branch Heads had higher ratings for Fair Selection (item 5), Adequate Handbook (item 7), Understandable Process (item 8), and Clear Criteria (item 9). Not surprisingly, the panel members had the highest scores for Conducted consistently (item 10), Agree with Panel Decision (item 15), and adequate Panel Reports (item 16). These responses are illustrated in Figure 15.

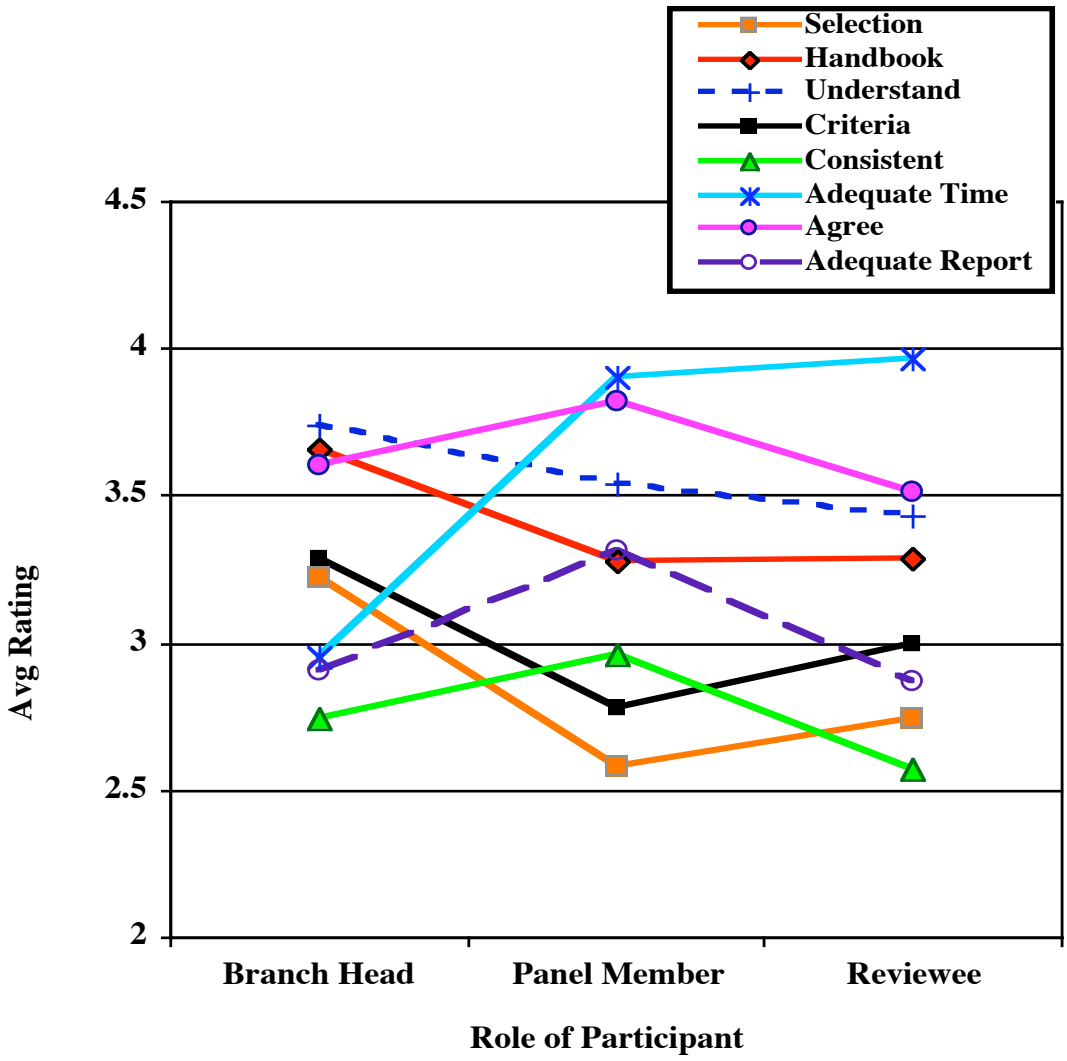


Figure 15. Significant survey response differences for participant role.

There has been some belief by some across all roles, including management, that participating in RDCP as a panel member first before being reviewed is beneficial. This is probably true in that being a panel member may have enabled former panel members to later write clearer packages as reviewees, given that they had some better idea of what content was relevant to the evaluation criteria. However, there was no statistical difference in promotions between reviewees who had been panel members before being reviewed and those who had either not been panel members yet or were panel members after being reviewed themselves.

Although there was not an overall difference in ratings of some items among the role of the participants, there were several items for which reviewees rated significantly differently depending upon if they were promoted or not. Reviewees who were promoted

rated these items higher than those who were decided to be at grade or for whom another decision was made (guide not applicable or insufficient information): Adequate Handbook (item 7), Understandable Process (item 8), Clear Criteria (item 9), Conducted Consistently (item 10), Improved Promotion Process (item 12), and Improved Morale (item 13), Agreed with Panel (item 15), and Adequate Panel Report (item 16). These responses are illustrated in Figure 16. The items that explained the most variance for reviewees were items 13 and 15 (21% and 32 %, respectively), that is, if they were promoted, they had high ratings for improved morale and agreed with the panel.

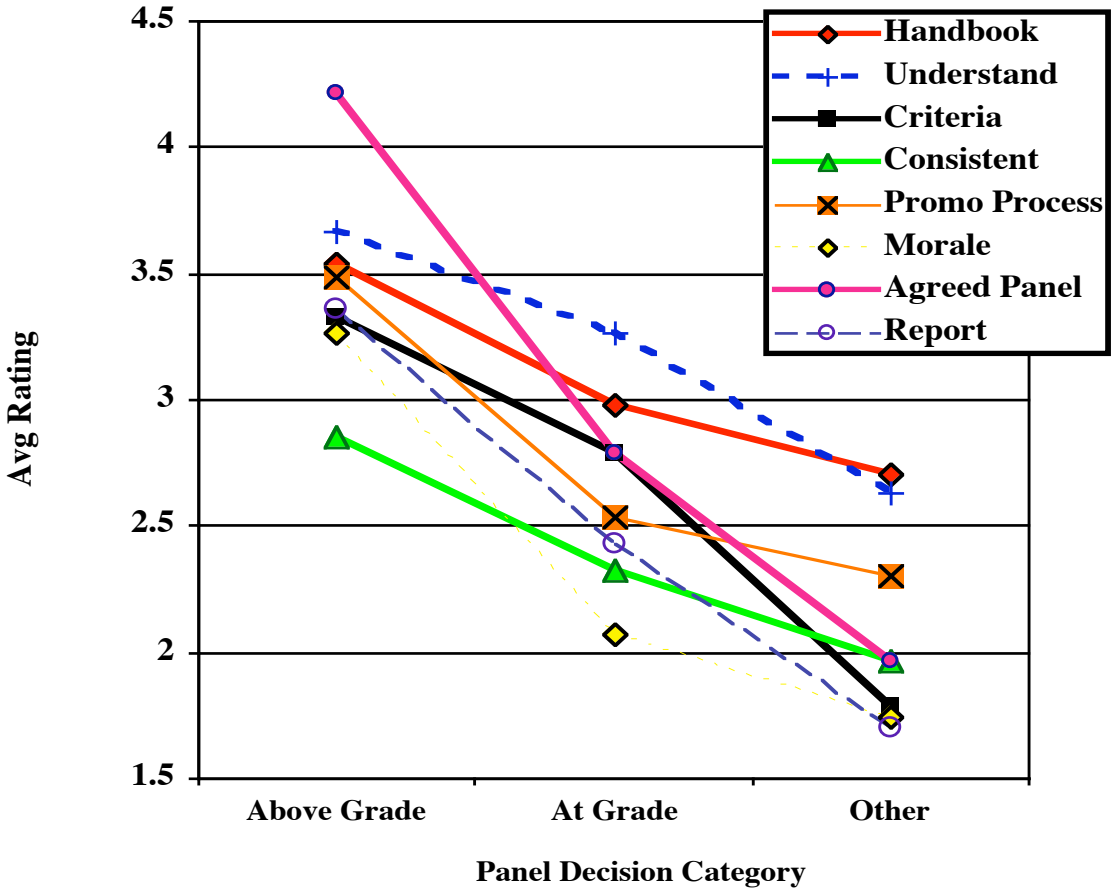


Figure 16. Significant survey response differences for Reviewees by panel decision category.

Overall all participants, ratings for Improved Morale (item 13) were due to the perception of RDCP being an improved *promotion* process and to a lesser extent agreeing with the panel decision. That is, 45% of the variance in Improved Morale ratings was significantly explained by ratings for Improved Promotion Process and 6% by Agreed with Panel. Clear Criteria accounted for another 4% of the variance.

In terms of comments received from the survey participants, they could be grouped into these general areas: general, managerial responsibility, time, consistency and quality, the

guides, training, and the process. Both positive and negative comments were received in each of these areas in each session. Some trends however were evident across sessions. As acceptance and understanding increased, the comments concentrated more on the quality and consistency of the process and rather than the need for the process as was evident from the first sessions. Requests for better explanation of criteria were consistent across the sessions. All of these items, as well as other concerns, have been addressed in training to a greater extent each session.

Center-wide Surveys

The NASA Langley Research Center has conducted two Center-wide Organizational Performance surveys in recent years. The first was conducted in 2000 and the second was done in 2002. Respondents were asked to rate the extent various items were true on a scale of 1 to 5 ("to a very small extent" to "to a very great extent", respectively). Two of these items are in part what led to the development of the RDCP initially. These two items, repeated in the 2002 survey, were the following:

> " Do you believe the Center's promotion processes provide employees a clear understanding of what they must do to be considered for promotion and a clear understanding of the process by which promotion decisions are made."
>
> "Are the Center's human resources (e.g., job competitions, promotions, awards, classification, training) fair and equitable."

The mean rating overall of R&T for the first item was 2.32 in the 2000 survey but increased to 2.80 in the 2002 survey. This difference in ratings for this first item was the largest increase from the 2000 survey. Likewise, the mean rating overall of R&T for the second item was 2.88 in the 2000 survey and increased to 3.02 in the 2002 survey. The RDCP was implemented between these two surveys, and according to 2002 survey comments was part of the reason for the ratings increase for these particular items. The 2002 survey report said, " In particular, some respondents stated that the new 'Research and Development Classification Process' (RDCP) has been successful in clarifying and putting objectivity in to a previously vague promotion process and that, although improvements are necessary, is providing a useful mechanism for classifying and promoting deserving workers in the technical areas. "

RDCP covered employees make up approximately 70% of the entire R&T population. And, while from the survey results it is not possible to discern who was and was not a RDCP respondent, the distribution of R&T respondents matched the general distribution of the R&T population, so that the assumption is made that a proportionate number of RDCP covered employees responded to the surveys. The mean rating overall the Center for these items were essentially the same as those for R&T because likewise R&T made up a large portion of both the population and survey respondents.

CHANGES MADE IN RDCP

The RDCP Manager assisted by the RDCP Advisory Committee (consisting of representatives from each Competency, OHR, EEO, and OCO) is charged with conducting, monitoring and improving the Research and Development Classification Process so that it is of high quality and consistency, as well as runs smoothly, by the end of the ninth session. In order to accomplish this, some changes have been made and will continue to be made through the ninth session or until the process is stabilized. Table 19 is a list of the major changes to date which have all been documented in updates in either the RDCP LMS CP 0019 or Guidance Document:

Table 19. List of changes made to RDCP through April 2004.

Item	Change
1	Changed supervisor informed to supervisor consents to employee serving as panel member.
2	Added RDCP manager as a person to field questions about panel decisions or determinations.
3	Specified the additional peer group wild card slots as being up to 30%.
4	Replaced "quarter" with "session."
5	Added how new employees are accommodated. Put in Session 10 or subsequent sessions based on four years from entry date or last promotion, as appropriate.
6	Added "The supervisor and Competency Director decide on the appropriate length of review delay depending upon the situation.
7	Clarified delay due to intend to retire. Request goes to Competency Director for approval before sent to RDCP manager and OHR. Needs to include anticipated date of retirement. If not retire, reviewed closest session to originally assigned session.
8	Changed panel size from seven to minimum of five to accommodate fewer reviewees in a session.
9	Clarified role of OHR, EEO representatives. Advisory only. Do not vote in panel decision.
10	In-depth Reviewers must contact four people: One person must be the Branch Head/Supervisor and one should be from outside NASA or at least outside LaRC if possible.
11	Clarified that panel returns actual grade rather than a category for results.
12	Added that ties within any promotion queue broken by Federal service computation date.
13	Clarified "below grade" and "borderline grade" scores and resulting procedures.
14	Added that subject matter expert must be a civil servant, cannot be someone who served on the panel, and must be trained in RDCP.
15	Request for reevaluations clarified. RDCP Manager must approve rationale for the request.
16	Extension of reevaluation appeal process from 30 days to 60 days to complete.

Table 19. List of changes made to RDCP through April 2004, continued.

17	Clarified development as part of research
18	RGEG panels can review using the EDGEG Part 3, rather than having to omit a reviewee as Guide Not Applicable.
19	No current grade information to be included anywhere in the reviewee write-ups because not relevant for applying evaluation criteria.
20	Clarified Team Leadership. Don't have to be a Level 3 or 4 or have other title to get credit. Can influence other's research to get credit.
21	Added electronic submission of packages to RDCP Manager along with hard copy to OHR by due date.
22	Added additional information to RDCP website.
23	Added Legal Representative to formal Advisory Committee membership
24	Panel member cannot also be reviewee in same session without permission from RDCP manager.
25	Competency Director obtains Branch Head concurrence for employee's assignment as panel member.
26	"Supervision received "clarified to mean level of influence, control and authority.
27	Various minor Employee Accomplishment Record format and instruction changes
28	Peer Group Name and Definition changes. Eliminated two Advanced Instrumentation groups and created new Flight Instrumentation Research and Sensors, Instrumentation, and Measurement groups. Added "and Systems" to the Computer Science and Engineering peer group name.
29	Use of LF515 discontinued to list contacts. Word format fine.
30	Created new RDCP database to track progress and results. Also used to send and receive RDCP documents and notices. Enhanced original capability to support cyclical reviews past Session 9.
31	Enhanced training materials for reviewees, branch heads, and panel members, including mock panel video.
32	Consensus panel reports are written real-time during panel sessions.
33	LMS process (CP-0019) and Guidance Document approved. Handbook no longer used.
34	Added clarification about EEO and RDCP in CP-0019.
35	Clarified panel confidentiality requirements and added these to Form 516.

Future Plans for Improvement

From survey responses and observations, several areas have been identified for future improvement. These include the following for the near term through Session 9:

- Continued education about how to best prepare a reviewee's package so that less time is required by all, both for preparation and review.
- Refinement of peer groups, especially Research Systems, to better fit the covered employee's area of work
- Adjustments in the ST pool referral criteria based on those used by other agencies

- Plan for wildcards in each session's budget.
- Adjusting RDCP to fit with new LaRC organizational structure and culture.

In addition, in the future after Session 9, additional changes may include the following:

- Combining multiple peer groups in peer evaluation meetings
- Disclosure of peer panel member names
- R&T employees participating as peer reviewers in other agency processes
- Inviting outside LaRC peers to be reviewers for RDCP
- If necessary, adjusting RDCP to fit future human capital resource management initiatives, such as pay banding or performance based pay.
- Adjusting RDCP to fit with future employee career profiles (e.g., not 30-year NASA employees anymore).
- Continuing to adjust RDCP to fit with new LaRC organizational structure and culture.

ISSUES

Budget

Effective and timely conducting of the RDCP depends upon having enough available budget to promote all of those reviewees the panels decide are above their current grade. Any reduction in budget causes a reduction in the number of people who can be reviewed in a session or a delay in conducting the session because no more people are reviewed than budget is available, based on the historical promotion rate of about 50%-60%. From session survey comments received, such reductions or threat of reductions reduce morale for all participants: reviewees, panel members, and branch heads. Some people view these constraints as implementing a form of quota on the RDCP covered positions. Furthermore, such reductions slow down the process such that reviews of all the originally assigned employees and of newly assigned employees slip. Recall that employees were promised the opportunity to be reviewed no later than their originally assigned session and that they would be reviewed at least every four years. Although, even with the budget constraints, everyone so far has had the opportunity to be reviewed in his or her assigned session and some other people have been moved up as wild cards, the time frames for the sessions were extended beyond those originally planned.

In order to plan the appropriate number of people to be reviewed and number of sessions for each fiscal year, *advance planning and commitment of the required budget is necessary early in the fiscal year*.

<u>Required Budget Estimates for FY05 and FY06</u>

Nominally three sessions are run each fiscal year although four could run if budget were available early at the beginning of the fiscal year. At present, it takes 120 days to run a complete session, from initial notification for reviewees until panel reports are released. (This time may be reduced after Session 9 if less preparation time is necessary for reviewees and/or panel members.) However, only two sessions were run for FY03 (Sessions 5 and 6) and for FY04 (Sessions 7 and future Session 8) due to slips waiting for budget confirmation. For example, the start of Session 6 was delayed six weeks to wait for confirmation of budget allocation for the remainder of FY2003, and the start of Session 8 was delayed ten weeks to wait for confirmation of budget allocation for the remainder of FY2004. A delay for the same reason but of shorter duration was experienced in March of 2002 for Session 3. Session 9 is scheduled to start in FY2004 but promotions will not be effective until FY2005. In addition, there is an extra session for some peer groups to finish the initial round of reviews due to larger numbers of reviewees in those peer groups and limited budget to review them earlier. Session 10 is the start of the regular cyclic reviews and reviews for people who were not assigned to one of the original nine sessions. People are assigned to Session 10 and beyond according to four years from their last promotion or entry to LaRC. See Table 20 for the number of

reviewees and estimated number of promotions for the Sessions 9, 9R (overflow for Session 9), and 10.

Table 20. Session 8 through Session 10 Number of Reviewees and Estimated Promotions.

Planned Fiscal Year	Session	No. of Assigned Reviewees	Est. Promo-tions	Est. New GS-14s	Wild Card slots (up to 30%) [1]	Estimated No. Promotions[2] (with wild cards)
2004	8 (03-3)	44	26	22	8	34
2005	9 (04-1)	95	49	17	8	57
	9R	51	27	17	0	27
End of original 9 sessions		190	102	56	16	84
2005?	10 (05-1)	60	32	15	16	48
Total		250				166

[1]Wildcard slots for each Competency equal up to 30% of each review session to allow early reviews or re-reviews for insufficient information or other cases. [2]Number of promotions based on historical rate through the first complete cycle of reviews.

The budget allocation for FY04 for RDCP was for 80 promotions, including re-evaluations, and Sessions 7 and 8. Estimated *minimum* of 84 slots are needed for FY05. To the extent additional slots are added, wild cards could be accommodated and/or the schedules accelerated. These 84 slots would be for Sessions 9 and 9R, which finishes the reviews planned for the original nine sessions.

The next session, Session 10, should also be in FY05 and would require an estimated 48 promotion slots. Session 10 is the start of the regular cyclical reviews. Those people currently assigned to Session 10 have four years since their last promotion or date of entry to NASA. These people would actually be eligible for reviews as early as one year from their last promotion or date of entry.

Once the stable review cycle is started, promotion rates should start dropping to something more like 30% per session based on the experience at other agencies with similar processes. However, because the original nine RDCP sessions have been spread out over four or five fiscal years rather than three years as originally estimated, the steady state reviews that will start in FY2005 or 2006 also must be planned in the budget. In that case, it may take another session or two to fall down to a steady 30% promotion rate.

Reorganization Impacts

At the time of this writing, the draft plan for the NASA Langley Reorganization was released. In it, RDCP was mentioned as requiring implementation changes. RDCP will fall under the auspices of OHR. What exactly this means and how RDCP will be changed is not yet known. It is hoped that the remaining employees who have not yet been reviewed, will have that opportunity in the near future. Likewise, it is hoped that there is an acknowledgment that employees' positions should be regularly reviewed and that a process remains available to accomplish those regular reviews.

There is also some indication that NASA Langley will be going to a pay-for-performance system in 2005. The connection, if any, to RDCP is also unknown at this time.

RDCP's Effect on Grade Level Distribution

At Langley

RDCP grade levels for those 698 reviewees in the first nine sessions, including promotions through Session 7, make up 41% of all non-supervisory GS-13s, 72% of all non-supervisory GS-14s, and 62% of all non-supervisory GS-15s at LaRC (as of April 2004). This is illustrated in Figure 17 along with the total number of each of these grade levels at the Center. The same RDCP reviewees' grade levels, the RDCP GS-13s, 14s, and 15s make up 10%, 14%, and 8%, respectively, of the Center's total workforce, or a total of 32% of entire Center's workforce. (This does not include new RDCP people who will be assigned to Session 10 and later.)

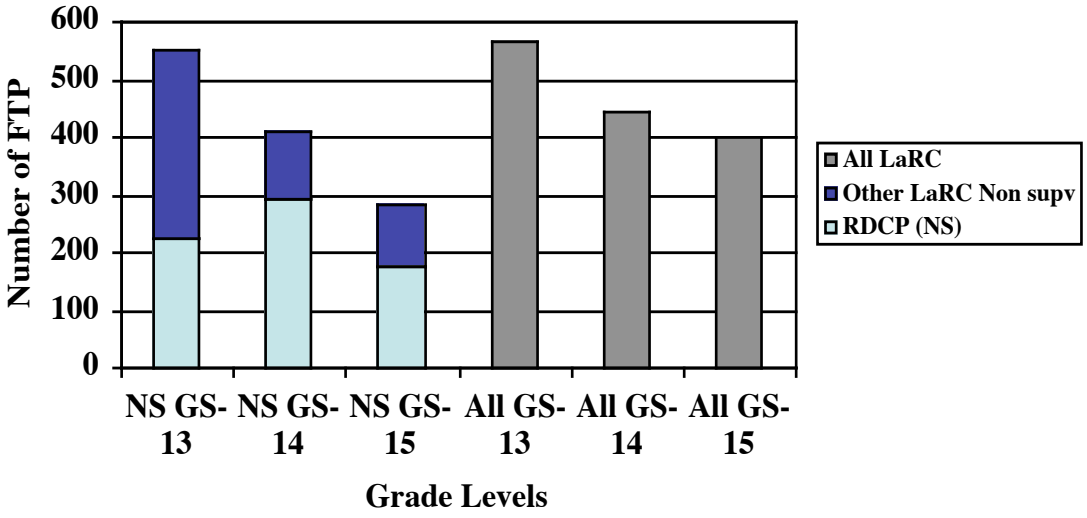


Figure 17. All Non-supervisory GS-13s, GS-14s, and GS-15s compared to the total number for these grades at LaRC, with those in RDCP highlighted. (NS means "non supervisory." Data as of April 2004.)

Compared to the Agency

Sixty-nine percent of NASA's total workforce is comprised of GS 13, 14, and 15 employees (29%, 23%, and 18%, respectively). The Scientist and Engineer occupational group has the highest percentage of GS 13, 14, and 15 employees with nearly 90% of its workforce in these grades.

To get an idea of how the grade levels for RDCP compare to those at the other Centers, the percentages of non-supervisory Scientist and Engineers (S&E) out of the total workforce for each Center are shown in Figure 18. Everyone in RDCP is in the S&E category, although there are others in that category not in RDCP. The percentages of the non-supervisory S&E GS-13s, GS-14s, and GS-15s at LaRC (16%, 16%, and 12%, respectively) are within 2-4 points of the totals for the Agency in this category. Some Centers have more and less of each of these grade levels, but Langley has neither the lowest nor highest percentages.

Therefore, although RDCP reviewees may make up the majority of the S&E population at LaRC, the resulting grade level distribution seems to be in line with other Centers and not adversely affecting the total grade level distribution within LaRC. In fact, if current promotion trends continue through Session 9 and 9R, the projected total increase to the Center's high grades would only be about four percent.

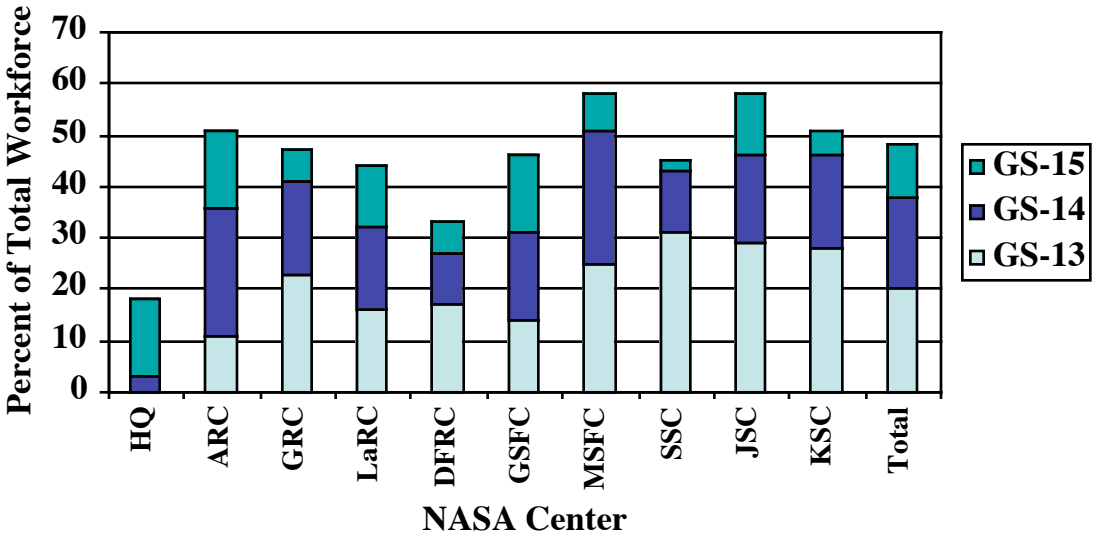


Figure 18. All non-supervisory S&E GS-13s, GS-14s, and GS-15s as percent of total workforce for each Center and total Agency (April 2004).

CONCLUSIONS

The Research and Development Classification Process (RDCP) has been used to review 481 eligible R&T employees in four sessions conducted from July 2001 through December 2003. The original plan was to review all eligible employees within two years during nine sessions or quarters. However, primarily due to limited budget availability along with some other changes, the schedules have stretched out so that the ninth session should start by the end of 2004, a year longer than originally planned. In addition to the 481 employees reviewed, up to 56 branch heads and 356 panel members have participated. The process does require some time, the average is between 29-69 hours, from all participants: branch heads, reviewees, and panel members. The process has had an approximate promotion rate of 56% based on all the people reviewed, after resolution of appeals and desk audits, for each session and has resulted in 271 promotions to GS-14 and GS-15 grade levels through Session 7. No statistical differences were found in results by race, Competency, peer group, or session in terms of grade change. Males and females have been promoted in proportion to the RDCP population. Results from surveys conducted at the end of each session indicate improved ratings over the seven sessions. In addition, positive comments were received from the 2002 Center survey about RDCP. Comments and results from both the session and Center surveys indicate that RDCP is perceived as a *promotion* process more than a pay documentation classification process. The number of GS-13 through GS-15 grade levels of the RDCP participants are in line with the distribution of these levels at other Centers and make up only 32% of LaRC's workforce. Budget availability drives the rate of the process and is critical to the Center's ability to keep commitments to the covered employees for timely reviews.

Indicators of the success of the RDCP are survey responses reflecting positive comments and improved employee morale. Ultimately, retention metrics may also be used to partially measure the success of RDCP. Even though some people see the process as time consuming and the job of branch heads, the overall benefits outweigh these current negative perceptions. Also, an apparent consequence of the RDCP is that budget allocations for other types of promotions may have been impacted. Perhaps an early working allocation of the entire Center's promotion budget, including RDCP, might ameliorate this problem. As positive experiences continue with the RDCP, these few negative perceptions and consequences should lessen.

After reviewing the results through Session 7 of the RDCP, the RDCP Manager and Advisory Committee recommend that monitoring of the process continue and improvements be made where possible. They further recommend that *firm budget allocations be made early in each fiscal year* to enable timely reviews. Furthermore, they recommend any changes to RDCP due to the Center reorganization still allow timely reviews for those employees not yet reviewed of the original nine sessions, specifically to continue Sessions 8, 9, and 9R.

APPENDIX A – Detailed Data Relative to Gender and Race

Table A-1 Original Distribution of race and gender for each Peer Group.

PEER GROUP		RACE						Gender Percentage
		NATIVE AMERICAN	ASIAN	BLACK	HISPANIC	WHITE	Total	
Aero & Acoustics	Female		1	2		9	12	0.14
	Male		7	5		64	76	0.86
	Total	0	8	7	0	73	88	
	Percentage	0.00	0.09	0.08	0.00	0.83	1.00	
Aerospace Systems Analysis	Female	0	0	1	0	8	9	0.13
	Male	1	7	0	1	52	61	0.87
	Total	1	7	1	1	60	70	
	Percentage	0.01	0.10	0.01	0.01	0.86	1.00	
Aerothermo & Hypersonic Propulsion	Female		1	0		4	5	0.14
	Male		1	1		29	31	0.86
	Total	0	2	1	0	33	36	
	Percentage	0.00	0.06	0.03	0.00	0.92	1.00	
Atmospheric Science	Female		0	0		10	10	0.14
	Male		12	2		48	62	0.86
	Total	0	12	2	0	58	72	
	Percentage	0.00	0.17	0.03	0.00	0.81	1.00	
Computational Methods	Female		0	0	0	5	5	0.11
	Male		5	1	2	32	40	0.89
	Total	0	5	1	2	37	45	
	Percentage	0.00	0.11	0.02	0.04	0.82	1.00	
Computer Sci & Engineering	Female			0		6	6	0.22
	Male			5		16	21	0.78
	Total	0	0	5	0	22	27	
	Percentage	0.00	0.00	0.19	0.00	0.81	1.00	
Crew Systems	Female		0	0	1	10	11	0.20
	Male		2	3	6	33	44	0.80
	Total	0	2	3	7	43	55	
	Percentage	0.00	0.04	0.05	0.13	0.78	1.00	
Dynamics & Controls	Female		0	1	1	12	14	0.23
	Male		4	1	1	42	48	0.77
	Total	0	4	2	2	54	62	
	Percentage	0.00	0.06	0.03	0.03	0.87	1.00	
Flight Instrumentation Research	Female		0	1		3	4	0.09
	Male		4	1		35	40	0.91
	Total	0	4	2	0	38	44	
	Percentage	0.00	0.09	0.05	0.00	0.86	1.00	
Research Systems	Female	0	1	2	1	13	17	0.13
	Male	1	4	4	8	99	116	0.87
	Total	1	5	6	9	112	133	
	Percentage	0.01	0.04	0.05	0.07	0.84	1.00	
Sensors, Instrum & Measurement	Female	0	0			3	3	0.06
	Male	1	9			39	49	0.94
	Total	1	9	0	0	42	52	
	Percentage	0.02	0.17	0.00	0.00	0.81	1.00	
Structural Mech & Adv Mtls	Female	0	2	1	0	13	16	0.27
	Male	1	1	4	1	36	43	0.73
	Total	1	3	5	1	49	59	
	Percentage	0.02	0.05	0.08	0.02	0.83	1.00	
Race Percentages	Female	0.00	0.04	0.07	0.03	0.86	1.00	0.15
	Male	0.01	0.09	0.04	0.03	0.83	1.00	0.85
	Total	0.01	0.08	0.05	0.03	0.84	1.00	

Table A-2 Distribution of Final Panel Decision by Race and Gender in Peer Groups.

Peer Group	Race	Gender	Final Decision			Total
			Above Grade	At Grade	Other	
Aerodynamics & Acoustics	White	F	3.9%	9.8%	0.0%	13.7%
		M	45.1%	33.3%	4.0%	86.3%
		Total	49.0%	43.1%	4.0%	100.0%
	Nonwhite	F	0.0%	16.7%	0.0%	16.7%
		M	33.3%	41.7%	8.3%	83.3%
		Total	33.3%	58.3%	8.3%	100.0%
Aerospace Systems Analysis	White	F	4.8%	9.5%	0.0%	14.3%
		M	40.5%	28.6%	16.6%	85.7%
		Total	45.2%	38.1%	16.6%	100.0%
	Nonwhite	F	0.0%	0.0%	10.0%	10.0%
		M	60.0%	30.0%	0.0%	90.0%
		Total	60.0%	30.0%	10.0%	100.0%
Aerothermo-dynamics/ Hypersonic Propulsion	White	F	0.0%	4.3%	0.0%	4.3%
		M	69.6%	21.7%	4.4%	95.7%
		Total	69.6%	26.1%	4.4%	100.0%
	Nonwhite	F	0.0%	100.0	0.0%	100.0%
		M	0.0%	0.0%	0.0%	0.0%
		Total	0.0%	100.0%	0.0%	100.0%
Atmospheric Science	White	F	7.5%	7.5%	2.5%	17.5%
		M	37.5%	45.0%	0.0%	82.5%
		Total	45.0%	52.5%	2.5%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	53.8%	30.8%	15.4%	100.0%
		Total	53.8%	30.8%	15.4%	100.0%
Computational Methods	White	F	4.3%	4.3%	8.7%	8.7%
		M	52.2%	39.1%	0.0%	91.3%
		Total	56.5%	43.5%	8.7%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	66.7%	33.3%	0.0%	100.0%
		Total	66.7%	33.3%	0.0%	100.0%
Computer Science	White	F	31.3%	0.0%	12.5%	43.8%
		M	31.3%	25.0%	0.0%	56.3%
		Total	62.5%	25.0%	12.5%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	100.0%	0.0%	0.0%	100.0%
		Total	100.0%	0.0%	0.0%	100.0%

Table A-2 Distribution of Final Decision by Race and Gender for Each Peer Group, continued.

PEER GROUP	Race	Gender	Final Decision			Total
			Above Grade	At Grade	Other	
Crew Systems	White	F	22.2%	0.0%	0.0%	22.2%
		M	51.9%	22.2%	3.7%	77.8%
		Total	74.1%	22.2%	3.7%	100.0%
	Nonwhite	F	10.0%	0.0%	0.0%	10.0%
		M	20.0%	60.0%	25.0%	90.0%
		Total	30.0%	60.0%	25.0%	100.0%
Dynamics & Controls	White	F	13.9%	8.3%	0.0%	22.2%
		M	52.8%	19.4%	5.6%	77.8%
		Total	66.7%	27.8%	5.6%	100.0%
	Nonwhite	F	0.0%	16.7%	0.0%	16.7%
		M	50.0%	16.7%	16.6%	83.3%
		Total	50.0%	33.3%	16.6%	100.0%
Flight Instrumentation	White	F	0.0%	7.1%	0.0%	7.1%
		M	42.9%	25.0%	25.0%	92.9%
		Total	42.9%	32.1%	25.0%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	80.0%	0.0%	20.0%	100.0%
		Total	80.0%	0.0%	20.0%	100.0%
Research Systems	White	F	4.8%	3.2%	0.0%	8.1%
		M	62.9%	21.0%	8.0%	91.9%
		Total	67.7%	24.2%	8.0%	100.0%
	Nonwhite	F	11.1%	0.0%	11.1%	22.2%
		M	22.2%	44.4%	11.2%	77.8%
		Total	33.3%	44.4%	22.3%	100.0%
Sensors, Instrum & Meas	White	F	0.0%	3.2%	0.0%	3.2%
		M	38.7%	48.4%	9.7%	96.8%
		Total	38.7%	51.6%	9.7%	100.0%
	Nonwhite	F	0.0%	0.0%	0.0%	0.0%
		M	20.0%	60.0%	20.0%	100.0%
		Total	20.0%	60.0%	20.0%	100.0%
Structures & Materials	White	F	10.3%	17.9%	2.6%	30.8%
		M	33.3%	20.5%	15.4%	69.2%
		Total	43.6%	38.5%	17.9%	100.0%
	Nonwhite	F	11.1%	11.1%	0.0%	22.2%
		M	44.4%	33.3%	0.0%	77.8%
		Total	55.6%	44.4%	0.0%	100.0%

APPENDIX B – Panel Decision Results by Category for Each Session by Peer Group and by Competency

Table B- 1a Results Over All Seven Sessions by Peer Group

All Sessions Peer Group		Final Decision			Total
		Above Grade	At Grade	Other	
Aero & Acoustics	Count	29	29	5	63
	% of Total	5.7%	5.7%	1.0%	12.4%
Aerospace Sys	Count	25	19	8	52
	% of Total	4.9%	3.7%	1.6%	10.2%
Aerothermo	Count	16	7	1	24
	% of Total	3.1%	1.4%	0.0	4.7%
Atmospheric Science	Count	25	25	3	53
	% of Total	4.9%	4.9%	0.6%	10.4%
Computational Methods	Count	19	13	0	32
	% of Total	3.7%	2.6%	0.0%	6.3%
Computer Sci	Count	11	4	2	17
	% of Total	2.2%	0.8%	0.3%	3.3%
Crew Systems	Count	23	12	2	37
	% of Total	4.5%	2.4%	0.4%	7.3%
Dynamics & Ctrls	Count	27	12	3	42
	% of Total	5.3%	2.4%	0.6%	8.3%
Flight Instrumentation	Count	16	9	8	33
	% of Total	3.1%	1.8%	1.6%	6.5%
Research Systems	Count	45	19	7	71
	% of Total	8.9%	3.7%	1.4%	14.0%
Sensors, Instrum & Meas	Count	13	19	4	36
	% of Total	2.6%	3.7%	3.1%	9.4%
Structures & Mtls	Count	22	19	7	48
	% of Total	4.3%	3.7%	1.4%	9.4%
Total	Count	271	187	50	508
	% of Total	53.3%	36.8%	9.9%	100.0%

Table B- 1b. Results Over All Seven Sessions by Competency

All Sessions Competency		Final Decision			Total
		Above Grade	At Grade	Other	
ASCAC	Count	32	24	10	66
	% of Total	6.3%	4.7%	2.0%	13.0%
AAAC	Count	62	46	10	118
	% of Total	12.2%	9.1%	1.9%	23.2%
SMC	Count	50	40	8	98
	% of Total	9.8%	7.9%	1.6%	19.3%
AIRSC	Count	53	27	9	89
	% of Total	10.4%	5.3%	1.8%	17.5%
AtSC	Count	25	24	3	52
	% of Total	4.9%	4.7%	0.6%	10.2%
SEC	Count	38	13	7	58
	% of Total	7.5%	2.6%	1.3%	11.4%
RFC	Count	7	9	3	19
	% of Total	1.4%	1.8%	0.5%	3.7%
FRSC	Count	4	4	0	8
	% of Total	0.8%	0.8%	0.0%	1.6%
Total	Count	271	187	50	508
	% of Total	53.3%	36.8%	9.9%	100.0%

Table B- 2a. Results for Session 1 by Peer Group

Session 1 Peer Group		Final Decision			Total
		Above Grade	At Grade	Other	
Aero & Acoustics	Count	7	4	0	11
	% of Total	10.6%	6.1%	0.0%	16.7%
Aerospace Sys	Count	5	4	0	9
	% of Total	7.6%	6.1%	0.0%	13.6%
Atmospheric Science	Count	5	5	0	10
	% of Total	7.6%	7.6%	0.0%	15.2%
Computional Methods	Count	4	3	0	7
	% of Total	6.1%	4.5%	0.0%	10.6%
Dynamics & Ctrls	Count	5	2	1	8
	% of Total	7.6%	3.0%	1.5%	12.1%
Flight Instrumentation	Count	2	0	0	2
	% of Total	3.0%	0.0%	0.0%	3.0%
Research Systems	Count	4	2	0	6
	% of Total	6.1%	3.0%	0.0%	9.1%
Sensors, Instrum & Meas	Count	1	3	0	4
	% of Total	1.5%	4.5%	0.0%	6.1%
Structures & Mtls	Count	3	6	0	9
	% of Total	4.5%	9.1%	0.0%	13.6%
Total	Count	36	29	1	66
	% of Total	54.5%	43.9%	1.5%	100.0%

Table B- 2b. Results for Session 1 by Competency

Session 1 Competency		Final Decision			Total
		Above Grade	At Grade	Other	
ASCAC	Count	5	6	0	11
	% of Total	7.6%	9.1%	0.0%	16.7%
AAAC	Count	9	4	0	13
	% of Total	13.6%	6.1%	0.0%	19.7%
SMC	Count	7	10	1	18
	% of Total	10.6%	15.2%	1.5%	27.3%
AIRSC	Count	6	3	0	9
	% of Total	9.1%	4.5%	0.0%	13.6%
AtSC	Count	5	5	0	10
	% of Total	7.6%	7.6%	0.0%	15.2%
SEC	Count	4	1	0	5
	% of Total	6.1%	1.5%	0.0%	7.6%
Total	Count	36	29	1	66
	% of Total	54.5%	43.9%	1.5%	100.0%

Table B- 3a. Results for Session 2 by Peer Group

Session 2 Peer Group		Final Decision			Total
		Above Grade	At Grade	Other	
Aero & Acoustics	Count	2	6	0	8
	% of Total	2.4%	7.1%	0.0%	9.5%
Aerothermo	Count	9	1	0	10
	% of Total	10.7%	1.2%	0.0%	11.9%
Atmospheric Science	Count	7	3	0	10
	% of Total	8.3%	3.6%	0.0%	11.9%
Computer Sci	Count	2	2	0	4
	% of Total	2.4%	2.4%	0.0%	4.8%
Crew Systems	Count	6	4	0	10
	% of Total	7.1%	4.8%	0.0%	11.9%
Dynamics & Ctrls	Count	6	3	0	9
	% of Total	7.1%	3.6%	0.0%	10.7%
Flight Instrumentation	Count	4	5	0	9
	% of Total	4.8%	6.0%	0.0%	10.7%
Research Systems	Count	4	10	1	15
	% of Total	4.8%	11.9%	1.2%	17.9%
Sensors, Instrum & Meas	Count	3	5	1	9
	% of Total	3.6%	6.0%	1.2%	10.7%
Total	Count	43	39	2	84
	% of Total	51.2%	46.4%	2.4%	100.0%

Table B- 3b. Results for Session 2 by Competency

Session 2 Competency		Final Decision			Total
		Above Grade	At Grade	Other	
ASCAC	Count	0	0	0	0
	% of Total	0.0%	0.0%	0.0%	0.0%
AAAC	Count	14	10	1	25
	% of Total	16.7%	11.9%	1.2%	29.8%
SMC	Count	3	3	0	6
	% of Total	3.6%	3.6%	0.0%	7.1%
AIRSC	Count	12	12	0	24
	% of Total	14.3%	14.3%	0.0%	28.6%
AtSC	Count	6	4	0	10
	% of Total	7.1%	4.8%	0.0%	11.9%
SEC	Count	8	10	1	19
	% of Total	9.5%	11.9%	1.2%	22.6%
Total	Count	43	39	2	84
	% of Total	51.2%	46.4%	2.4%	100.0%

Table B- 4a. Results for Session 3 by Peer Group

Session 3 Peer Group		Final Decision			Total
		Above Grade	At Grade	Other	
Aero & Acoustics	Count	2	5	0	7
	% of Total	2.4%	6.0%	0.0%	8.3%
Aerospace Sys	Count	5	6	0	11
	% of Total	6.0%	7.1%	0.0%	13.1%
Atmospheric Science	Count	3	6	0	9
	% of Total	3.6%	7.1%	0.0%	10.7%
Computational Methods	Count	5	5	0	10
	% of Total	6.0%	6.0%	0.0%	11.9%
Crew Systems	Count	7	1	1	9
	% of Total	8.3%	1.2%	1.2%	10.7%
Dynamics & Ctrls	Count	7	4	0	11
	% of Total	8.3%	4.8%	0.0%	13.1%
Flight Instrumentation	Count	5	0	0	5
	% of Total	6.0%	0.0%	0.0%	6.0%
Research Systems	Count	7	1	1	9
	% of Total	8.3%	1.2%	1.2%	10.7%
Sensors, Instrum & Meas	Count	1	2	0	3
	% of Total	1.2%	2.4%	0.0%	3.6%
Structures & Mtls	Count	6	4	0	10
	% of Total	7.1%	4.8%	0.0%	11.9%
Total	Count	48	34	2	84
	% of Total	57.1%	40.5%	2.4%	100.0%

Table B- 4b. Results for Session 3 by Competency

Session 3 Competency		Final Decision			Total
		Above Grade	At Grade	Other	
ASCAC	Count	6	5	0	11
	% of Total	7.1%	6.0%	0.0%	13.1%
AAAC	Count	5	10	0	15
	% of Total	6.0%	11.9%	0.0%	17.9%
SMC	Count	13	7	0	20
	% of Total	15.5%	8.3%	0.0%	23.8%
AIRSC	Count	14	5	1	20
	% of Total	16.7%	6.0%	1.2%	23.8%
AtSC	Count	2	6	0	8
	% of Total	2.4%	7.1%	0.0%	9.5%
SEC	Count	8	1	1	10
	% of Total	9.5%	1.2%	1.2%	11.9%
Total	Count	48	34	2	84
	% of Total	57.1%	40.5%	2.4%	100.0%

Table B- 5a. Results for Session 4 by Peer Group

Session 4 Peer Group		Final Decision			Total
		Above Grade	At Grade	Other	
Aero & Acoustics	Count	3	2	1	6
	% of Total	6.4%	4.3%	2.1%	12.8%
Aerospace Sys	Count	1	3	1	5
	% of Total	2.1%	6.4%	2.1%	10.6%
Atmospheric Science	Count	1	4	0	5
	% of Total	2.1%	8.5%	0.0%	10.6%
Computer Sci	Count	6	1	1	8
	% of Total	12.8%	2.1%	2.1%	17.0%
Flight Instrumentation	Count	2	2	1	5
	% of Total	4.3%	4.3%	2.1%	10.6%
Research Systems	Count	7	0	0	7
	% of Total	14.9%	0.0%	0.0%	14.9%
Sensors, Instrum & Meas	Count	2	1	0	3
	% of Total	4.3%	2.1%	0.0%	6.4%
Structures & Mtls	Count	6	2	0	8
	% of Total	12.8%	4.3%	0.0%	17.0%
Total	Count	28	15	4	47
	% of Total	59.6%	31.9%	8.5%	100.0%

Table B- 5b. Results for Session 4 by Competency

Session 4 Competency		Final Decision			Total
		Above Grade	At Grade	Other	
ASCAC	Count	4	3	2	9
	% of Total	8.5%	6.4%	4.3%	19.1%
AAAC	Count	7	4	1	12
	% of Total	14.9%	8.5%	2.1%	25.5%
SMC	Count	7	3	0	10
	% of Total	14.9%	6.4%	0.0%	21.3%
AIRSC	Count	3	1	1	5
	% of Total	6.4%	2.1%	2.1%	10.6%
AtSC	Count	1	3	0	4
	% of Total	2.1%	6.4%	0.0%	8.5%
SEC	Count	6	1	0	7
	% of Total	12.8%	2.1%	0.0%	14.9%
Total	Count	28	15	4	47
	% of Total	59.6%	31.9%	8.5%	100.0%

Table B-6a. Results for Session 5 by Peer Group

Session 5 Peer Group		Final Decision: Above Grade	At Grade	Other	Total
Aero & Acoustics	Count	7	4	1	12
	% of Total	9.0%	5.1%	1.3%	15.4%
Aerospace Sys	Count	5	1	1	7
	% of Total	6.4%	1.3%	1.3%	9.0%
Aerothermal/ Hypersonic	Count	4	5	1	10
	% of Total	5.1%	6.4%	1.3%	12.8%
Atmospheric Science	Count	4	5	0	9
	% of Total	5.1%	6.4%	0.0%	11.5%
Crew Systems	Count	4	4	1	9
	% of Total	5.1%	5.1%	1.3%	11.5%
Dynamics & Controls	Count	7	2	1	10
	% of Total	9.0%	2.6%	1.2%	12.8%
Flight Instrumentation	Count	3	2	3	8
	% of Total	3.8%	2.6%	3.9%	10.3%
Research Systems	Count	9	1	3	13
	% of Total	11.5%	1.3%	3.9%	16.7%
Total	Count	43	24	11	78
	% of Total	55.1%	30.8%	14.1%	100.0%

Table B- 6b. Results for Session 5 by Competency

Session 5 Competency		Final Decision: Above Grade	At Grade	Other	Total
ASCAC	Count	5	2	1	8
	% of Total	6.4%	2.6%	1.3%	10.3%
AAAC	Count	12	9	2	23
	% of Total	15.4%	11.5%	2.6%	29.5%
SMC	Count	2	1	0	3
	% of Total	2.6%	1.2%	0.0%	3.8%
AIRSC	Count	11	7	2	20
	% of Total	14.1%	9.0%	2.5%	25.6%
AtSC	Count	4	5	0	9
	% of Total	5.1%	6.4%	0.0%	11.5%
SEC	Count	8	0	6	14
	% of Total	10.3%	0.0%	7.6%	17.9%
RFC	Count	1	0	0	1
	% of Total	1.3%	0.0%	0.0%	1.3%
Total	Count	43	24	11	78
	% of Total	55.1%	30.8%	14.1%	100.0%

Table B-7a. Results for Session 6 by Peer Group

Session 6		Final Decision			
Peer Group		Above Grade	At Grade	Other	Total
Aero & Acoustics	Count	4	5	0	9
	% of Total	5.6%	6.9%	0.0%	12.5%
Aerospace Sys	Count	6	2	4	12
	% of Total	8.3%	2.8%	5.6%	16.7%
Aerothermal/ Hypersonic	Count	4	1	0	5
	% of Total	5.6%	1.4%	0.0%	6.9%
Atmospheric Science	Count	4	0	2	6
	% of Total	5.6%	0.0%	2.7%	8.3%
Computational Methods	Count	4	2	0	6
	% of Total	5.6%	2.8%	0.0%	8.3%
Dynamics & Controls	Count	2	2	0	4
	% of Total	2.8%	2.8%	0.0%	5.6%
Research Systems	Count	7	4	0	11
	% of Total	9.7%	5.6%	0.0%	15.3%
Sensors,Instrum, & Meas	Count	1	5	2	8
	% of Total	1.4%	6.9%	2.8%	11.1%
Structural Mech & Adv Matls	Count	5	2	4	11
	% of Total	6.9%	2.8%	5.6%	15.3%
Total	Count	37	23	12	72
	% of Total	51.4%	31.9%	16.7%	100.0%

Table B- 7b. Results for Session 6 by Competency

Session 6		Final Decision			Total
Competency		Above Grade	At Grade	Other	
ASCAC	Count	7	4	4	15
	% of Total	9.7%	5.6%	5.6%	20.8%
AAAC	Count	11	8	2	21
	% of Total	15.3%	11.1%	2.8%	29.2%
SMC	Count	8	7	4	19
	% of Total	11.1%	9.7%	5.6%	26.4%
AIRSC	Count	1	0	0	1
	% of Total	1.4%	0.0%	0.0%	1.4%
AtSC	Count	4	0	2	6
	% of Total	5.6%	0.0%	2.8%	8.3%
SEC	Count	6	1	0	7
	% of Total	8.3%	1.4%	0.0%	9.7%
RFC	Count	0	2	0	2
	% of Total	0.0%	2.8%	0.0%	2.8%
FRSC	Count	0	1	0	1
	% of Total	0.0%	1.4%	0.0%	1.4%
Total	Count	37	23	12	72
	% of Total	51.4%	31.9%	16.7%	100.0%

Table B-8a. Results for Session 7 by Peer Group

Session 7		Final Decision			
Peer Group		Above Grade	At Grade	Other	Total
Aero & Acoustics	Count	5	3	0	8
	% of Total	6.7%	4.0%	0.0%	10.7%
Aerospace Sys	Count	4	4	1	9
	% of Total	5.3%	5.3%	1.4%	12.0%
Atmospheric Science	Count	2	2	1	5
	% of Total	2.7%	2.7%	1.3%	6.7%
Computational Methods	Count	6	3	0	9
	% of Total	8.0%	4.0%	0.0%	12.0%
Crew Systems	Count	6	4	0	10
	% of Total	8.0%	5.3%	0.0%	13.3%
Research Systems	Count	7	2	0	9
	% of Total	9.3%	2.7%	0.0%	12.0%
Sensors,Instrum, & Meas	Count	5	3	1	9
	% of Total	6.7%	4.0%	1.3%	12.0%
Structural Mech & Adv Matls	Count	2	6	2	10
	% of Total	2.7%	8.0%	2.6%	13.3%
Total	Count	41	28	6	75
	% of Total	54.7%	37.3%	8.0%	100.0%

Table B- 8b. Results for Session 7 by Competency

Session 7		Final Decision			Total
Competency		Above Grade	At Grade	Other	
ASCAC	Count	6	4	2	12
	% of Total	8.0%	5.3%	2.6%	16.0%
AAAC	Count	10	4	1	15
	% of Total	13.3%	5.3%	1.4%	20.0%
SMC	Count	8	10	2	20
	% of Total	10.7%	13.3%	2.7%	26.7%
AIRSC	Count	7	5	0	12
	% of Total	9.3%	6.7%	0.0%	16.0%
AtSC	Count	3	2	1	6
	% of Total	4.0%	2.7	1.3%	8.0%
SEC	Count	4	2	0	6
	% of Total	5.3%	2.7%	0.0%	8.0%
RFC	Count	2	1	0	3
	% of Total	2.7%	1.3%	0.0%	4.0%
FRSC	Count	1	0	0	1
	% of Total	1.3%	0.0%	0.0%	1.3%
Total	Count	41	28	6	75
	% of Total	54.7%	37.3%	8.0%	100.0%

APPENDIX C – Survey Issued after Each RDCP Session

Research and Development Classification Process Questionnaire

In order to improve the Research and Development Classification Process, feedback from all the participants is critical, whether you are a reviewee, a panel member, or a Branch Head. The survey below was designed to gather that feedback yet be quick and easy to do. While your participation in this survey is completely voluntary, your response would help form a more accurate picture of how the RDCP is progressing. Your responses are completely anonymous. The data will be analyzed and presented as representative of the entire sample, such as ranges, averages, variances, and percentages. This survey will close (date that is three weeks after survey announcement inserted here) at 5:00pm. The results, but not the data, of the survey will be made available to all RDCP participants and will be posted on the RDCP website: http://ohr.larc.nasa.gov/RDCP.html. This survey, or one similar to it, will be repeated for each session.

Please respond to all items by clicking on the appropriate answer or by typing in the information requested.

Thank you for your help in improving the RDCP!

1. Please indicate which Guide you used for the RDCP.
    1. Research Grade Evaluation Guide or EDGEG Part 3
    2. Equipment Development Guide (any part)

2. Please estimate the amount of time, in hours, you spent working on RDCP.

3. Please indicate your participant role
    1. Branch Head/Supervisor
    2. Panel member
    3. Reviewee

The following statements (items 5-16) should be rated according to how each applies to your personal situation or experience. Please rate each statement from 1 to 5 and provide any comments to explain your answer or to make suggestions in item 18. Scale (0 = no opinion or don't know, 1 =Strongly Disagree, 2 =Disagree, 3= Neither Disagree nor Agree, 4 =Agree, 5 =Strongly Agree)

5. The RDCP reviewee selection method is fair to most RDCP AST researchers and developers.

6. Your RDCP training was adequate.

7. The RDCP Handbook (Guidance Document) was adequate.

APPENDIX C – Survey Issued after Each RDCP Session, continued

8. The RDCP process is understandable.

9. The RDCP process provides clear criteria for classification of job duties.

10. The RDCP process is conducted consistently across all researchers, to your knowledge.

11. The RDCP process is an improvement over the old classification process.

12. The RDCP process is an improvement over the old promotion process

13. Your morale has increased due to implementation of the RDCP process.

14. You were allowed by your supervisor adequate time to work on the RDCP.

15. You agree with the panel's decision(s) (regardless of role)

16. The panel evaluation report was adequate to explain the scores received.

17. If you were a **reviewee**, please indicate the category for your panel's decision
    1. Above Grade your current grade
    2. At Grade your current grade
    3. Below Grade your current grade
    4. Other

18. Please provide any general comments or explanations of your responses here.